

Ministry of Mines
National Mineral Exploration & Development Trust
Minutes of 14th meeting of Technical-cum-Cost Committee - II (TCC - II)
held on 7th & 8th October, 2025

The 14th meeting of Technical-cum-Cost Committee – II (TCC - II) of National Mineral Exploration and Development Trust (NMEDT) was held through video conferencing under the Chairmanship of Shri Pradeep Singh, Deputy Director General (DDG), Geological Survey of India (GSI) and Chairman, TCC-II, NMEDT on 7th & 8th October 2025.

Members of TCC-II, NMEDT and representatives from M/s APC Drilling & Construction Private Limited, M/s Ocean Drilling & Exploration Private Limited, FCI Aravali Gypsum & Minerals India Limited (FAGMIL), DGM Mizoram, DGM Bihar, DGM Jharkhand, M/s Gems Project Private Limited, M/s Enkay Enviro Services Private Limited, M/s Geo Marine Solutions Private Limited, M/s Envirogreen Consultants (India) Private Limited, M/s Vardan Environet LLP, M/s Geovale Services Private Limited, M/s GeoExpOre Private Limited, DMG Rajasthan have attended the meeting through video conferencing mode. The list of participants is at **Annexure-1**.

Shri Pradeep Singh, DDG, GSI and Chairman, TCC-II, NMEDT warmly welcomed all TCC-II members and every participant representing various State DGMs/DMGs, Notified Exploration Agencies (NEAs) and Notified Private Exploration Agencies (NPEAs).

Agenda 14.1 Technical Evaluation of New Project Proposals

Agenda 14.1.1 Reconnaissance survey for Bauxite and associated minerals in Chhelana area, Amreli District, Gujarat.

[Implementing Agency: M/s APC Drilling & Construction Private Limited]

- a) The proposed area of 9.18 sq. km, for reconnaissance survey (G4), is located on Survey of India Toposheet No. 41P/5 and falls within parts of Amreli District, Gujarat.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	This project has been carved out from the report RN-29 titled <i>Report on the bauxite deposits in some of the villages of Ahavnagar, Amreli and Junagadh districts, Gujarat</i> allotted to the agency from 51 reports shortlisted from the legacy reports of various state DGMs/DMGs for upgradation through NMEDT funds (3 rd Joint TCC dated 4.9.2025)
2	CGM Gujarat	

- c) M/s APC Drilling & Construction Private Limited informed that during the field seasons 1975–76 and 1976–77, GSI carried out investigations for concealed bauxite in the Mangrol–Keshod lateritic belt of Junagadh District as a sequel to its earlier investigations for bauxite in the Porbandar area (parts of Toposheet Nos. 41K/3, 41K/4, and 41K/8). GSI drilled 85 drillholes and based on the surface and subsurface geological data, a total of ten pockets of concealed bauxite/bauxitic clay deposits were delineated and bauxite resource of around 2.43 million tonnes was estimated. The proposed block was initially investigated by the Commissioner of Geology and Mining (CGM), Gujarat, carried out trenching in the block and estimated bauxite resource of 0.146 million tons . Based on GSI and CGM Gujarat investigations, CGM Gujarat has

identified an area of 9.18 Sq.km for G4 stage of exploration to further demarcate Bauxite mineralization and associated minerals. Further, APC team has conducted field visits and identified bauxite associated with Laterite in and around the proposed block. Total 21 grab samples were collected and submitted for chemical analysis for which results are awaited.

- d) The committee suggested to collect more samples to enhance the confidence level for mineral evidence. The committee opined that the project cannot be taken up based on single analytical result.
- e) The TCC-II opined that the proposal would be reviewed after the results of the 21 samples submitted by the implementing agency for chemical analysis are received.

Recommendation TCC-II

The committee placed the proposal on hold until the analytical results are received.

Agenda 14.1.2 Reconnaissance survey for Bauxite and associated minerals in Longadi area, Bhavnagar District, Gujarat.

[Implementing Agency: M/s APC Drilling & Construction Private Limited]

- a) The proposed area of 10.40 sq. km., for reconnaissance survey (G4), falls in Survey of India Toposheet number 41O/16 in parts of Bhavnagar district, Gujarat.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	This project has been carved out from the report RN-29 titled <i>Report on the bauxite deposits in some of the villages of Ahavnagar, Amreli and Junagadh districts, Gujarat</i> allotted to the agency from 51 reports shortlisted from the legacy reports of various state DGMs/DMGs for upgradation through NMEDT funds (3 rd Joint TCC dated 4.9.2025)
2	CGM Gujarat	

- c) M/s APC Drilling & Construction Private Limited informed that during the field seasons 1975–76 and 1976–77, GSI carried out investigations for concealed bauxite in the Mangrol–Keshod lateritic belt of Junagadh District as a sequel to its earlier investigations for bauxite in the Porbandar area (parts of Toposheet Nos. 41K/3, 41K/4, and 41K/8)GSI drilled 85 drillholes and based on the surface and subsurface geological data, a total of ten pockets of concealed bauxite/bauxitic clay deposits were delineated and bauxite resource of around 2.43 million tonnes was estimated. The proposed block was initially investigated by the Commissioner of Geology and Mining (CGM), Gujarat. They carried out trenching and drilling and estimated bauxite resource of 1.46 million tone . The chemical analyses of samples from boreholes shows average Al₂O₃ of 53.70 % with SiO₂ around 6.76%. Based on GSI and CGM investigation, CGM Gujarat has identified an area of 10.40 Sq.km for G4 stage of exploration to further demarcate Bauxite mineralization and associated minerals (as provided in list 42 blocks by GCM Gujarat). Further APC team conducted field visits and identified bauxite associated with Laterite in and around the proposed block. Also, few samples were collected and submitted for chemical analysis for which results are awaited.
- d) The committee suggested to collect more samples to enhance the confidence level for mineral evidence. The committee opined that the project cannot be taken up based on single analytical result.

- e) The TCC-II opined that the proposal would be reviewed after the results of the collected samples, submitted by the implementing agency for chemical analysis are received.

Recommendation TCC-II

The committee placed the proposal on hold until the analytical results are received.

Agenda 14.1.3 Preliminary exploration for Vanadium, Graphite, Barium and associated mineral in Chaura-Maunkaunda block, Champawat District, Uttarakhand.

[Implementing Agency: M/s Ocean Drilling & Exploration Private Limited]

- a) The proposed block for preliminary exploration (G3), covering 3.59 sq. km area, falls within Survey of India Toposheet nos. 62C/3 and 53O/15, in parts of Champawat District, Uttarakhand. In-principle-approval was given for this proposal in 12th TCC-II meeting held on 22nd, 25th, 26th & 27th August 2025. The DPR was reviewed in 13th TCC-II meeting held on 22nd, 23rd & 24th September 2025. In the 13th TCC-II meeting, the committee advised the agency to conduct limited fieldwork in the proposed area, including sampling and petrographic studies.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	GSI informed that preliminary exploration (G3 stage) for vanadium is being carried out by GSI for field season 2025-26 in parts of Toposheet no - 62C/03 which is lying in the eastern part of Sundungra, Chaura - Maunkanda block and not overlapping with ongoing GSI block.
2	DGM Uttarakhand	Informed that the block proposed by M/s Ocean Drilling & Exploration Pvt. Ltd. does not overlap with any existing blocks and that there is no ongoing exploration activity by DGM Uttarakhand in the area.
3	MECL	Informed that the proposed Chaura - Maunkanda block does not overlap with current and previous exploration blocks of MECL.

- c) M/s Ocean Drilling & Exploration Private Limited informed that during the Field Season 2022–23, reconnaissance survey was carried out by GSI. The survey involved the systematic collection and analysis of various sample types, including 100 bedrock samples (BRS) and 50 channel samples, 15 pitting and trenching samples. Chemical analysis of these samples revealed anomalously high concentration of Ba, V, and fixed carbon. The maximum concentration of Vanadium obtained is 3627 ppm, Ba 30,093 ppm, Y 265 ppm, Mo 246.44 ppm. Fixed Carbon analysis of 3 samples showed BRS-8 with 6.26% FC and CH-35 with 2.32% FC.
- d) The TCC-II advised geological mapping on 1:4000 scale along with topographical survey, Trenching, sampling, chemical analysis and geophysical survey (Self Potential, 20-line km) in 1st Phase of the project.
- e) If the results of geological mapping, geophysical ground survey and chemical analysis of surface samples are found to be encouraging, a suitable drilling plan will be formulated and implemented in the second phase of the project, subject to due recommendation and approval of the TCC.
- f) The cost sheet is tentative and subject to revision of Schedule of Charges (SoC) of NMEDT.

Recommendation TCC

The committee recommended the proposal for approval of EC for “Preliminary exploration (G3) for Vanadium, Graphite, Barium and other associated minerals in Chaura- Maunkanda block, Champawat district, Uttarakhand” with an estimated cost of 173.91 Lakh (including GST) within the time schedule of 18 months (including the drilling and core sampling and analysis component) and submission of the report as per the cost sheet. The item will be reviewed after 6 months & 12 months.



**Estimated Cost for Preliminary exploration (G3) for Vanadium, Graphite, Barium and other associated minerals in Chaura- Maunkanda block,
Champawat district, Uttarakhand.**

Area: 3.59 sq.km, Scale-1:4000 (Schedule timeline: 18 months Review: After 06 & 12 Months)

Implementing Agency: M/s Ocean Drilling & Exploration Private Limited

PHASE-I: DETAILED MAPPING & GROUND GEOPHYSICAL SURVEY

S. No.	Item of Work *	Unit *	Rates as per NMET SoC 2020-21		Estimated Cost of the Proposal			Remarks
			SoC-Item No. *	Rates as per SoC * (a)	Qty. (b)	Total Amount (Rs) (a*b)	Hilly terrain of Himalaya region (Total amount X 3.35)	
A	Geological Mapping Other Geological Work & Surveying							
1	a. Charges for Geologist per day (Field) for geological mapping, drilling work, core logging & sample marking	day	1.2, 1.5.1a	11,000	100	11,00,000	36,85,000	3.59 sq.km in Hilly area
	b. Labours Charges; Base rate	day	5.7	541	200	1,08,200	3,62,470	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
	c. Charges for Geologist per day (HQ)	day	1.2	9,000	60	5,40,000	5,40,000	
2	a. Charges for one Sampler per day (1 Party)	one sampler per day	1.5.2	5,100	60	3,06,000	10,25,100	

	b. Labours (4 Nos)	day	5.7	541	240	1,29,840	4,34,964	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
	Sub Total- A					21,84,040	60,47,534	
B	Survey work							
1	DGPS Survey for boundary points fixation & RL determination	Per Point of observation	1.6.2	19,200	4	76800	257280	4 Boundary points
2	Charges of Surveyor (1 party) for topographic mapping in 1:4000 scale and contouring at 5m interval	one surveyor per day	1.6.1a	8,300	80	664000	2224400	3.59 sq.km in Hilly area
3	Labours Charges for survey work (4 labourers)	day	5.7	541	320	173120	579952	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
	Sub-Total B					9,13,920	30,61,632	
C	Trenching							
1	Excavation of trenches upto 2.0m depth	per cu.m	2.1.1	3330	200	666000	2231100	1. Trenching: 20 trenches of 10mx1mx1m (Approx.)
	Sub-Total B					666000	2231100	
D	Ground Geophysical Survey							
1	self potential (8-20 line km)	L km	3.3a	29600	1	29,600	99,160	
6	Expert charges for Geophysicist in HQ	day	3.18	9000	5	45,000	45,000	
7	Expert charges for Geophysicist in Field	day	3.18	11000	10	1,10,000	3,68,500	
	Sub Total D					1,84,600	5,12,660	
E	LABORATORY STUDIES							
1	Chemical Analysis							

i)	Primary samples							
	Trench samples :Primary (1m sample length) for major oxides and LOI by XRF	Nos	4.1.15a	4,200	200	840000	8,40,000	a. 50 nos. BRS samples and 50 nos. of channel samples, . 100 nos Trench sample b. elements V, Ba, Ga, Mo, U, Co, Cu, Pb, Zn, Y
	+ 10 % Check Sample	nos	4.1.15a	4,200	20	84000	84,000	
	Trench Samples: Graphite Proximate Analysis:	Nos	4.1.16	3,000	30	90000	90,000	15 nos. from BRS samples and 15 nos. from trench samples
	+ 10 % Check Sample	nos	4.1.16	3,000	3	9000	9,000	
	ICPMS	Nos	4.1.14	7,731	200	1546200	15,46,200	34 elements by ICPMS Method including U, Th, V, Ba, Ga, Mo, Co, Cu, Pb, Zn, Y & REE
	Sub Total D					25,69,200	25,69,200	
F	LABORATORY STUDIES							
3	XRD analysis for identification of minerals (Random)	Nos	4.5.1	4,000	10	40,000	40,000	
4	Physical & Petrological Studies							
i	Preparation of thin section	Nos	4.3.1	2,353	10	23,530	23,530	
ii	Study of thin section	Nos	4.3.4	4,232	10	42,320	42,320	
iii	Preparation of polished section	Nos	4.3.3	1,185	10	11,850	11,850	
iV	Digital Photographs	Nos	4.3.7	280	10	2,800	2,800	
V	Raman Spectrometry (graphite crystallinity)	Nos	Not in Soc	5,000	5	25,000	25,000	As per actual rate
6	EPMA	hrs	4.4.1	8,540	20	1,70,800	1,70,800	
	Sub Total E					3,16,300	3,16,300	
G	Total A to E					78,00,620	1,47,38,426	
L	Total Estimated Cost without GST						1,47,38,426	
M	Provision for GST (18% of J)						26,52,917	GST will be reimbursed as per actual and as per notified prescribed rate

N	Total Estimated Cost with GST			-	1,73,91,343	
			or Say Rs. In Lakhs	-	173.91	
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 execution of the project by NEA on its own, a Certificate 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.					
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency					
7*	The cost is tentative subject to revision of SoC					




Time Schedule Action Plan for Preliminary exploration (G3) for Vanadium, Graphite, Barium and other associated minerals in Chaura- Maunkanda block, Champawat district, Uttarakhand Schedule Timeline: Phase-I (Total 6 months)								
S.No.			1	2	3	4	5	6
1	Camp Setting	Months/Days						
2	Geological Mapping & Sampling	days						
3	Ground Geophysical survey	Line Km						
4	Geophysicist party days (HQ) for data interpretation & Report	Days						
5	Survey Party days	days						
6	Geologist Man days (Field)	days						
7	Geologist Man days (HQ)	days						
10	Sampler Man days	days						
11	Laboratory Studies	Nos.						

Review





Agenda 14.1.4 Reconnaissance Survey for Potash mineralization in Bhiyansar area, Churu District, Rajasthan.

[Implementing Agency: FCI Aravali Gypsum & Minerals India Limited (FAGMIL)]

- a) The proposed area for reconnaissance survey (G4), covering 13.0 sq. km, falls within Survey of India Toposheet No. 44 L/06, in parts of Churu District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	GSI informed that a Reconnaissance Survey (G4 stage) for Potash mineralization is proposed during FS 2025–26, about 22 km south of the Bhiyansar block. The proposed area is considered potential for Potash and does not overlap with any ongoing GSI exploration blocks.
2	DMG Rajasthan	Informed that the block proposed by FCI Aravali Gypsum & Minerals India Limited (FAGMIL) has not been subjected to any exploration for Potash mineralization by DMG Rajasthan in this area.
3	MECL	Comments were pending at the time of the meeting.

- c) The TCC-II opined that several NMEDT-funded exploration projects for potash are currently underway in Rajasthan and, more recently, in Punjab. The positive outcomes of these projects, along with the auctioning of potash blocks, will be the key factors in determining whether further projects in these areas will be pursued or not.

Recommendation TCC

The committee opined that outcome of NMEDT-funded ongoing exploration projects for Potash in Rajasthan should be reviewed and then only further projects in these areas will be pursued.

Agenda 14.1.5 Preliminary Survey for Potash mineralization in Hanseran Dulmera Block, Bikaner District, Rajasthan.

[Implementing Agency: FCI Aravali Gypsum & Minerals India Limited (FAGMIL)]

- a) The proposed area for preliminary exploration (G3), covering 20.1 sq. km, falls within Survey of India Toposheet no. 44H/11, in parts of Bikaner District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that based on past data from boreholes RJNGH-03 and RJNGH-04 (G4 stage) showing >2% K with 3.5–4 m cumulative thickness, the area is feasible for Potash exploration. No ongoing exploration for Potash in the area.
2	DMG Rajasthan	The comments were received following the discussion whereby it was informed that this proposal area does not fall in Forest and there are no litigations conflicting with this proposal area. This proposal area is conflicting with one applied mining lease for mineral Gravel, Kankar and Murram area 3.99 hectares. As per aforesaid information, consent for exploration is given in the said area excluding applied mining lease area

3	MECL	Comments were pending at the time of the meeting.
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- c) The TCC-II opined that several NMEDT-funded exploration projects for potash are currently underway in Rajasthan and, more recently, in Punjab. The positive outcomes of these projects, along with the auctioning of potash blocks, will be the key factors in determining whether further projects in these areas will be pursued or not.

Recommendation TCC

The committee opined that outcome of NMEDT-funded ongoing exploration projects for Potash in Rajasthan should be reviewed and then only further projects in these areas will be pursued.

Agenda 14.2 Review of Ongoing Procurement Projects & Timeline Extension

Agenda 14.2.1 Financial Assistance from NMEDT funds to procure Machinery Laboratory Equipment/instruments etc. aimed at enhancing the exploration activities.

[Implementing Agency: DGM Mizoram]

- a) DGM, Mizoram informed that, the Initial approved cost for Fusion Bead Machine was ₹20,00,000/- (27th EC meeting, Project 1). They requested for Cost Enhancement of Fusion Bead Machine. It was further briefed by the agency that an extensive market survey for a suitable Fusion Bead Machine was conducted, and it was decided that Katanax X-100 would best suit the needs. A quotation of ₹37,59,363/- (including taxes) has been received from an agency in this regard. Which includes cost of the instrument ₹20,50,000/- along with Platinum Wares for ₹10,90,901/- excluding taxes.
- b) The TCC-II considered some of the previous procurement made by various agencies. The DGM, Nagaland has procured the Fusion Bead machine at a cost of ₹25,00,000/- . *As compared to this the cost of the instrument in the present proposal is only ₹20,50,000/- the additional cost of ₹10,90,901/- is for procurement of Platinum Wares.* The Geological Survey of India, Lucknow (NR) has also purchased single bead machine along with WD-XRF Machine. The cost of the package was ₹2.07 Crore *including the cost of the Fusion Bead machine. Considering the above fact, the committee decided that the proposal of DGM, Mizoram for additional cost of ₹17,59,363/- with ₹20,50,000/- as cost of instrument and ₹10,90,901/- towards Platinum Wares is reasonable.*

Recommendation TCC

The committee recommends the proposal for approval of EC for “allocation of additional ₹17,59,363/- (including GST) for procurement of Fusion Bead Machine along with Platinum Wares”.

Agenda 14.2.2 Financial Assistance from NMEDT funds to procure Machinery Laboratory Equipment/instruments etc. aimed at enhancing the exploration activities.

[Implementing Agency: DGM, Bihar]

- a) The project-I was recommended by 51st TCC held on 27th & 28th March 2023 and approved by 29th EC held on 31st March 2023 with schedule time for 12 months and sanction date 17.04.2023. The approved cost of the project was INR 15,50,000/-

- b) DMG Bihar, has received the 1st instalment advance of Rs. 6,20,000/- for the project. The proposal was not presented by DGM, Bihar.

Sl. No.	Name of Item	Qty.	Estimated Cost per unit (Rs.)	Total Estimated cost (Rs)	Procurement Status
Project -I					
1	Hand held GPS	5	30,000	1,50,000	Under Process
2	Brunton Compass	5	8,000	40,000	Procured
3	Geological Hammer	5	8,000	40,000	Under Process
4	Digital Camera	2	10,000	20,000	Procured
5	GSI Software	1 License	13,00,000	13,00,000	Procured, Installed
	Total			15,50,000	
Project -II					
1	Hand held GPS	20	30,000	6,00,000	Under Process
	Total			21,50,000	

- c) The proposal was not presented by DGM, Bihar.

Agenda 14.2.3 Financial Assistance from NMEDT funds to procure Machinery Laboratory Equipment/instruments etc. aimed at enhancing the exploration activities.

[Implementing Agency: DGM, Jharkhand]

- a) The project was recommended by 49th TCC held on 30th and 31st January 2023 and approved by 28th EC held on 16th March 2023 with schedule time for 12 months and sanction date 18.08.2023. The approved cost of the project was INR ₹5,27,90,000/-. Detailed of the approved procurement item are given below:

Sl. No.	Name of Item	Qty.	Estimated Cost per unit (Rs.)	Total Estimated cost (Rs)	Procurement Status
1	Digital Camera	10	90000	900000	Not Procured
2	Brunton Compass	20	10000	200000	Not Procured
3	Geological Hammer	20	10000	200000	Not Procured
4	Hand-held GPS	20	95000	1900000	Not Procured
5	Hydraulic Core Splitter	1	200000	200000	Not Procured
6	Vibratory Cup Mill with accessories	1	600000	600000	Not Procured
7	ICP- MS (Ultra-Pure Water System)	1	20000000	20000000	Not Procured
8	XRF	1	16000000	16000000	Not Procured
9	Fusion Bead Machine	1	2000000	2000000	Not Procured
10	Press Palette machine	1	390000	390000	Not Procured
11	Grinding and Polishing Machine	1	7000000	7000000	Not Procured

	and mounting unit				Not Procured
12	Transmitted and Reflected light, research Microscope with software attached camera	1	1200000	1200000	Not Procured
13	Proximate Analyzer (TGA)	1	2200000	2200000	Not Procured
	Total			5,27,90,000	

- b) The 1st Instalment amounting to ₹2.11 crore was released on 29th August 2023.
- c) DGM, Jharkhand informed that the tender bidding and procurement processes are still pending. Further, they requested an extension of the timeline for completion of the procurement process.
- d) The TCC-II opined that, given the significant delay of over a year beyond the stipulated 11-month timeline in the procurement process, the proposal should be referred to the NMEDT for appropriate decision on the matter.

Recommendation TCC

The committee referred the proposal to NMEDT for appropriate decision on the matter.

Agenda 14.3 Project Evaluation for In-Principle-Approval

Agenda 14.3.1 Reconnaissance survey for Bauxite and associated mineralization in Chakdipapat-Dokapat area, Gumla District, Jharkhand.

[Implementing Agency: M/s Gems Project Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 20.82 sq. km, falls within Survey of India Toposheet No. 73A/7 & 73A/8, in parts of Gumla District, Jharkhand.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that the no ongoing exploration for Bauxite in the area.
2	DMG, Jharkhand	DMG, Jharkhand informed that G4 level exploration has already been done in this area. Further, State DGM has proposed G3 level exploration blocks in this area which has an overlap with the proposed area by Gems Project Private Limited.
3	MECL	Informed that the proposed Chakdipapat-Dokapat area does not overlap with current and previous exploration block of MECL.

- c) The committee suggested to M/S Gems to contact DMG Jharkhand & clarify the present status of proposed areas, as DMG reported that they are already exploring the area.
- d) The agency informed the committee that they have modified the block area based on the available information on DGM website.
- e) The TCC-II placed the proposal on hold till the receipt of comments from DGM, Jharkhand to NMEDT.

Recommendation TCC

The committee placed the proposal on hold till the receipt of comments from DGM, Jharkhand to NMEDT.

Agenda 14.3.2 Reconnaissance survey for Bauxite and associated mineralization in Manatu area, Gumla District, Jharkhand.

[Implementing Agency: M/s Gems Project Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 25.25 sq. km, falls within Survey of India Toposheet No. 73A/8, in parts of Gumla District, Jharkhand.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that no exploration work has been carried out in the proposed block for Bauxite
2	DGM, Jharkhand	DGM, Jharkhand informed that G4 level exploration has already been done in this area. Further, State DGM has proposed G3 level exploration blocks in this area which has an overlap with the proposed area by Gems Project Private Limited.
3	MECL	Comments were pending at the time of the meeting

- c) The committee suggested to M/S Gems to contact DMG Jharkhand & clarify the present status of proposed areas, as DMG reported that they are already exploring the area.
- d) The agency informed the committee that they have modified the block area based on the available information on DGM website.
- e) The TCC-II placed the proposal on hold till the receipt of comments from DGM, Jharkhand to NMEDT.

Recommendation TCC

The committee placed the proposal on hold till the receipt of comments from DGM, Jharkhand to NMEDT.

Agenda 14.3.3 Reconnaissance survey for REE and Zirconium and Associated Mineralization near village Kohnia and Dhawar, Mahoba District, Uttar Pradesh.

[Implementing Agency: M/s Enkay Enviro Services Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 22.1 sq. km, falls within Survey of India Toposheet No. 54O/7, in parts of Mahoba District, Uttar Pradesh.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that a Reconnaissance Survey (G-4 stage) for REE mineralization was carried out in the Bundelkhand Granitoid Complex, covering the Bahadurpur Kalan–Sijari Buzurg area in Jhansi and Hamirpur districts of Uttar Pradesh. As per the findings presented in the submitted GSI report (Field Season 2016–17, NGCM, the analytical results for REE and Zirconium (Zr) concentrations were found to be low and not encouraging for further exploration
2	AMD	The agency has not carried out any exploration. There is no ongoing project.
3	DGM Uttar Pradesh	Comments were pending at the time of the meeting
4	MECL	

- c) M/s Enkay Enviro Services Private Limited informed that GSI has carried out G4 level investigation in Bundelkhand granitoid complex, Bahadurpur Kalan- Sijari Buzurg area,

Jhansi – Hamirpur districts, Uttar Pradesh in toposheet no. 54O/7 and found Total REE is not very encouraging. The highest Σ REE values are found for grey to pink granite samples from Sarserh and Mahobkanth area, with 870ppm to 1080 ppm. Soil sample from the same area had the highest Σ REE value of about 854 ppm. Pegmatites of the study area also possess very weak potential for REE with Σ REE values ranging from about 450 to 730 ppm. NGCM data shows Zr values between 229 ppm to 1125 ppm, with high concentrations near Lahchuraghat, Kohnia Naipur and Pipri. NAGMP data indicates high uranium counts in Bahadurpur Kalan, Mahobkanth and Lahchuraghat with varying thorium levels. Zr Concentration Ranges from 229 ppm to 1125 ppm, Higher Zr Concentrations Values above 771.62 ppm has been observed near Lahchuraghat & Kohnia (Dhasan River Basin) Naipur (Keolari River Basin)

- d) The TCC-II opined that the values of REE & Zr are not so encouraging from GSI report (FS 2026-17 and NGCM), which has been referred for formulation of this project proposal.

Recommendation TCC

The committee did not agree for in-principle-approval of the proposal.

Agenda 14.3.4 Reconnaissance survey for REE/RM in Balesar-Bhandu Charna area, Jodhpur District, Rajasthan

[Implementing Agency: M/s Enkay Enviro Services Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 30.4 sq. km, falls within Survey of India Toposheet No. 45B/7, in parts of Jodhpur District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that the Earlier, M/s Enkay Enviro Services Pvt. Ltd. had submitted a proposal that showed overlapping with the GSI G-4 stage block of FS 2025-26. Subsequently, the NPEA has submitted a revised G-4 stage proposal which does not show any overlapping.
2	AMD	Informed that AMD plans to undertake geological and geophysical exploration for REE/RM mineralization in and around the proposed block during F.S. 2025–26. The earlier proposed block had a partial overlap with AMD's area; however, NPEA has now submitted a revised G-4 stage proposal eliminating the overlap.
3	DMG Rajasthan	DMG has not carried out any exploration for mineral REE/RM and Associated Mineralisation in this area.
4	MECL	Comments were pending at the time of the meeting.

- c) M/s Enkay Enviro Services Private Limited informed that GSI initiated a Regional Mineral Targeting (RMT) project in select areas of Jodhpur and Barmer districts with the primary objective of delineating zones favourable for rare earth elements (REE), rare metals (RM), and base metal (BM) mineralization, and understanding the associated mineral systems. The project was undertaken based on the promising outcomes of the National Aero-Geophysical Mapping Program (NAGMP), carried out by GSI during FS 2017–18 which led to identification of two concealed ring structures. These structures displayed magnetic signatures comparable to the mineral-rich Siwana Ring Complex. The northern part showed ring-type residual magnetic anomalies, and

the southern part displayed elliptical-type anomalies, with magnetic intensity peaking at 15,000 nT—likely due to highly magnetic volcanic materials. Additionally, linear anomalies in the central part (10,000–12,500 nT) and gravity highs suggested the presence of domal or dense subsurface structures. The area is also covered by National Geochemical Mapping (NGCM) and National Geophysical Mapping (NGPM) programs (FS 2021–22. Nine scout boreholes were drilled in the RMT project, (depth range: 100–350m).

- d) The TCC-II opined that several NMEDT-funded exploration projects for REE/RM are currently underway in Rajasthan. The positive outcomes of these projects will be the key factor in determining the further exploration in these areas.

Recommendation TCC

The committee agreed for in-principle-approval of the proposal. DPR will be accepted after review of any of the final geological report of NMEDT-funded REE/RM projects from adjacent areas.

Agenda 14.3.5 Reconnaissance survey for Graphite and associated Minerals in Kalipahari-Mukandpura (Block-A) and Jatwara-Khoh (Block- B), Alwar District, Rajasthan.

[Implementing Agency: M/s APC Drilling & Construction Private Limited]

- a) The proposed areas for reconnaissance survey (G4), covering 8.1 sq. km (Block-A) and 24.60 sq. km. (Block-B), are falling within Survey of India Toposheet nos. 54A/15 & 54A/16, in parts of Alwar District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that the no ongoing exploration/reconnaissance project of GSI is being carried out related to graphite and other minerals in the proposed area. However, GSI has already proposed a mineral based STM project in the proposed NPEA area for FS 2026-27 to find out new areas for graphite mineralization.
2	DMG Rajasthan	Informed that it does not have any ongoing exploration projects for graphite or other minerals in the proposed area. The proposed areas (Both Block-A & Block-B) have an overlap with Aravalli range area.
3	MECL	Informed that MECL does not have any ongoing exploration projects for graphite or other minerals in the proposed area.

- c) As per the comments from DMG, Rajasthan the proposed areas (Both Block-A & Block-B) have an overlap with Aravali.
- d) M/s APC Drilling & Construction Private Limited informed that GSI during FS 2019-20 carried out reconnaissance survey for Graphite in parts of Rajgarh-Saloli area, Alwar District, Rajasthan (Stage- G4) to delineate Graphite mineralisation in the area. The analytical results of 80 samples have shown fixed carbon (FC) values ranging from 0.3% to 17.35%. The carbon phyllite unit that contains graphite in the area extends for over a strike length of about 10km and is exposed at two locations in the block namely Jamdoli and Saloli village. Carbon phyllite in other parts is under soil cover. The

proposed blocks are the northern Eastern extension of the carbon phyllite of GSI Reconnaissance survey for Graphite in parts of Raiearh - Saloli area (2019-20).

- e) The TCC-II advised modification in the proposed areas. The committee suggested exclusion of Aravali area from proposal and agreed for in-principle-approval of the proposal for Block-A i.e. Kalipahari-Mukandpura. Proposed. Area in Block-A may be extended in non-Aravali part.

Recommendation TCC

The committee agreed for in-principle-approval of the proposal for Kalipahari-Mukandpura (Block-A) and subject to exclude area falling in Aravalli.

Agenda 14.3.6 Reconnaissance survey for Base metals and associated minerals in the area between Patan and Kachariya villages, Ajmer and Jaipur District, Rajasthan.

[Implementing Agency: M/s GeoMarine Solutions Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 99 sq. km, falls within Survey of India Toposheet No. 45J/14 & 45N/2, in parts of Ajmer and Jaipur Districts, Rajasthan.
- b) The agency informed the committee that majority of the area is soil covered and they proposed to carryout drone magnetic and EM (Electromagnetic survey) work to target the probable deep seated mineralization. The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	No project is being carried out in the proposed area, however there is a minor overlap with the Harmara-Tiloniya G4 block FS 2021-22. Based on the mineralization recorded in nearby blocks, the area appears to have potential for base metal and associated mineralization.
2	DMG Rajasthan	Representative was present during discussions
3.	MECL	Comments were pending at the time of the meeting.

- c) The committee observed the overlap with Vardan Private Limited project Mandawariya -Silora area (45J/14 & 45J/15) (6th TCC-II) where DGM Rajasthan informed that the area of proposed block falls under Ajmer Development Authority (under Nagar Nigam Jurisdiction).
- d) The TCC-II opined that, NOC approval from Ajmer Development Authority is required for implementation of this project. Also, NOC approval from DMG, Rajasthan is required.
- e) The renotification of the agency is pending and therefore the approval cannot be accorded.

Recommendation TCC

The committee does not recommend the proposed preliminary exploration since the re-notification of the agency is still pending.

Agenda 14.3.7 Reconnaissance survey for Tungsten in Rauldega Bandega area, Sundargarh, District, Odisha.

[Implementing Agency: M/s GeoMarine Solutions Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 100.76 sq. km, falls within Survey of India Toposheet No. 73B/3, in parts of Sundargarh District, Odisha.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that the in FS: 2026-27, GSI has taken up a mineral biased STM project in which all the components of G4 stage investigation will be conducted with specific emphasis on Tungsten mineralization. The project has already been approved. The proposed NMET block falls totally within the STM block of GSI. Hence, the proposed block can't be recommended for any G4 level exploration.
2	DMG Odisha	Comments were pending at the time of the meeting
3	MECL	

- c) As per the comments from GSI the proposed area has an overlap with GSI's STM area.
- d) The TCC-II advised NMEDT secretariat to seek the information from GSI, about coordinates of GSI's STM area. This information to be shared with Geo Marine Solutions Private Limited for avoiding the overlapping areas. Fresh proposal to be submitted for in-principle-approval.
- e) The renotification of the agency is pending and therefore the approval cannot be accorded.

Recommendation TCC

The committee does not recommend the proposed preliminary exploration since the re-notification of the agency is still pending

Agenda 14.3.8 Preliminary exploration for Copper, Chromium, Nickel and associated minerals in Pheela and Jamun block, Udaipur district, Rajasthan.

[Implementing Agency: M/s Envirogreen Consultants (India) Private Limited]

- a) The proposed block for preliminary exploration (G3), covering an area of 7 sq. km, falls within Survey of India Toposheet No. 45L/3, in parts of Udaipur District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	Informed that the Based on previous exploration carried out by GSI, the proposed G3 block shows low potential for significant copper mineralization, as indicated by sparse and erratic copper values without structural or lithological control. Based on current findings, further stage exploration is not recommended.
2	DMG Rajasthan	The comments were received following the meeting whereby the DMG comments showed that the proposal area has conflict with three held mining leases of mineral Quartz and Feldspar. This proposed area lies within 500 meters periphery of Forest and does not conflict with ESZ. There are no other litigations in the proposal area. As per

		aforesaid information, consent for exploration for this proposal is given for the area excluding mining leases.
3	MECL	Comments were pending at the time of the meeting.

- c) M/s Envirogreen Consultants (India) Private Limited informed that earlier studies showed encouraging value of Cu (0.2 to 1.32 %), Cr (1000ppm to 1.12 %) & Nickel (up to 0.3%). Few old workings are reported near Jamun village where high values of Cr & Ni were previously reported.
- d) The committee observed that the values of Cu are erratic , not demonstrating lithological & structural control of mineralisation.
- e) The TCC-II opined that based on available analytical data of surface samples only, the proposal cannot be taken up for G3 level of exploration.

Recommendation of TCC-II

The committee did not agree for in-principle-approval of the proposal.

Agenda 14.3.9 Preliminary exploration for Kyanite, Copper and basemetal in Lakhola block, Bhilwara district, Rajasthan.

[Implementing Agency: M/s Envirogreen Consultants (India) Private Limited]

- a) The proposed block for preliminary exploration (G3), covering an area of 5 sq. km, falls within Survey of India Toposheet No. 45K/8, in parts of Bhilwara District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	GSI has not conducted any investigation for Kyanite in the proposed area, making it difficult to comment on its potential at the G3 stage. The NPEA's proposed G3 block partially overlaps with GSI's Lakhola block (FS 2021-22), where no significant copper zones were encountered and no further exploration was recommended, indicating limited potential for base metals and associated mineralization in the proposed block.
2	MECL	Comments were pending at the time of the meeting.
3	DMG Rajasthan	The comments show the overlap of Northeastern part of proposed area with held Mining leases of Quartz and Feldspar.

- c) M/s Envirogreen Consultants (India) Private Limited informed that two mining lease area fall in Northeastern part of the proposed study area for which NMEDT advised to NPEA for exploration (closed/non-working mine) vide their mail dated 14.05.2025.. Further investigation of quartz-kyanite veins and reefs in association with graphite and twinned staurolite crystals on both sides of synformal belt of Satdudhiya-BharakLakhola belt is recommended as the geophysical investigation is unable to identify anomaly for kyanite and patches are concealed under soil, hence its true and lateral subsurface extension could not be verified at G-4 level exploration. Pegmatites and quartzo-feldspathic veins with beryl and apatite may be investigated for REE and associated strategic minerals (MECL report of G-4 Stage of Satdudhiya-Lakhola-Bharak Block of February,2018).

- d) The TCC-II placed the proposal on hold. The committee asked NMEDT secretariat to verify the status of the proposed block's 10A(2)(b) case as per MMDR Act, 1957 as amended in 2015.

Recommendation of TCC-II:

The committee placed the proposal on hold for verification of status of the proposed block's 10A(2)(b) case.

Agenda 14.3.10 Preliminary exploration for copper, cobalt and associated minerals in Lalpura block, Udaipur District, Rajasthan.

[Implementing Agency: M/s Envirogreen Consultants (India) Private Limited]

- a) The proposed block for preliminary exploration (G3), covering an area of 4 sq. km, falls within Survey of India Toposheet No. 45H/15, in parts of Udaipur District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	As per the comment received from GSI, the proposed block has an overlap with GSI's G3 block of FS 2021-22 & 2022-23.
2	DMG Rajasthan	As per aforesaid information, consent for exploration cannot be given as the proposal area falls in Aravali status.
3	MECL	Comments were pending at the time of the meeting

- c) In view of the above, the committee did not agree for in-principle-approval of the proposal.

Recommendation of TCC-II

The committee did not agree for in-principle-approval of the proposal.

Agenda 14.3.11 Reconnaissance survey for REE and associated Mineralisation in Rakh Panchampur- Andhiyar - Kalapahar Area, Lalitpur District, Uttar Pradesh.

[Implementing Agency: M/s Vardan Environet LLP]

- a) The proposed area for reconnaissance survey (G4), covering 49.21 sq. km, falls within Survey of India Toposheet No. 54L/5, in parts of Lalitpur District, Uttar Pradesh.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	As per the comment received from GSI, the proposed block has slight overlap with GSI's G4 blocks of FS 2025-26 & 2023-24 for REE and RM mineralization in the northeastern and western part.
2	DGM Uttar Pradesh	There are no past Reconnaissance/Exploration works carried out by DGM in the proposed area. There are no ongoing exploration/reconnaissance projects related to REE and associated minerals and any other mineral/commodity in the proposed area. No Composite License or Mining Lease is given in the proposed area.

		Four minor mineral lease is running within the proposed area.
3	AMD	AMD has carried out exploration for uranium in and around the proposed block in different phases and located surface radioactivity hosted by granites and quartz reefs. Grab samples analysed up to 600 ppm U ₃ O ₈ . There is no ongoing exploration / reconnaissance project.
4	MECL	Comments were pending at the time of the meeting

- c) M/s Vardan Environet LLP informed that, Regional Mineral Targeting (RMT) carried out during FS 2019-21, by GSI, has shown the REE values in bed rock samples ranging between 22ppm to 1053.47ppm. The TREE values of 05 bed rock samples (BRS) are more than 800ppm in the area adjacent to the proposed block. The TREE values in regolith samples ranges between 47 ppm to 1884.40ppm. G-4 stage work carried out by GSI in FS 2023-24, indicated partial enrichment of REE and reported >1000ppm TREE values in 7 seven samples out total 56 regolith samples collected. The current proposed block has been formulated on the western extension of the same area. In the proposed block, 2 samples collected by GSI, showed Total REE values of 1734ppm and 1486ppm. Few scout boreholes have been recommended in GSI's report in adjacent area.
- d) The committee opined that results do not establish any trend and the agency has not made any field visit. The host rock is not established for the REE, presence of high strontium and barium in the sample results does not favour the REE mineralization. The committee discussed the grab samples analysis of AMD where values up to 600 ppm was reported which is approximately 10 times the crustal abundance.
- e) The TCC-II opined that surface sample values of REE from GSI's investigation are not so encouraging for taking up the proposed area for investigation.

Recommendation of TCC-II

The committee did not agree for in-principle-approval of the proposal.

Agenda 14.3.12 Reconnaissance survey for Basemetal in Bamarda area, Sikar District, Rajasthan.

[Implementing Agency: M/s Geovale Services Private Limited]

- a) The proposed area for reconnaissance survey (G4), covering 180 sq. km, falls within Survey of India Toposheet No. 45M/10, in parts of Sikar District, Rajasthan.
- b) The table containing the comments is given below.

S.N.	Agency	Comment
1	GSI	As per the comment received from GSI the proposed area under consideration shows a significant overlap of approximately 60% with the area already covered under GSI's exploration activities
2	DMG Rajasthan	Comments were pending at the time of the meeting
3	MECL	As per the comment received from MECL the proposed blocks of M/s Geovale completely overlaps with the proposed Bamrada block of MECL. This block is under process of getting consent from DMGR.

- c) The committee observed that the proposed project overlapped with approved project of Salwari area of M/s Vardhan (12th TCC-II and with M/s MTCS proposed similar Bamarda area (180 sq. km, TS-45M/10) in 7th TCC-II. As per the comments from AMD, no further work is suggested in the proposed block.
- d) The TCC-II advised modification in proposed area by exclusion of the GSI's exploration area. Fresh proposal to be submitted for in-principle-approval.
- e) The renotification of the agency is pending and therefore the approval cannot be accorded.

Recommendation TCC-II;

The committee does not recommend the proposed preliminary exploration since the re-notification of the agency is still pending

Agenda 14.4 Cost Evaluation of New Project Proposals

Costing has been done, and comments are included in respective agenda.

Additional Agenda

Agenda 14.5 Review of Ongoing projects & Timeline Extension

Agenda 14.5.1 Reconnaissance Survey (G4 Stage) For Graphite and associated Minerals around Sonaghati, Amdol, Jharegaon & Bhayawari, District: Betul, Madhya Pradesh.

[Implementing Agency: M/s GeoExpOre Private Limited]

- a) The project was recommended by 62nd TCC held on 28th & 29th February and 01st March 2024 and approved by 34th EC held on 13th March 2024 with schedule time for 12 months and sanction date 11.03.2025. The approved cost of the project was INR 1,05,04,174/- & the Revised Cost was INR 1,11,47,274/
- b) M/s GeoExpOre Private Limited informed that Peer Review of the final geological report has been done. All comments/suggestions given by peer reviewer are attended and incorporated in final geological report.
- c) The TCC-II agreed for submission of Final Geological Report.

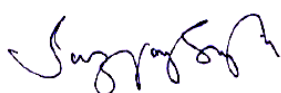
Recommendation TCC-II;

The committee agreed for submission of Final Geological Report.

Annexure -1

List of participants attended 14th meeting of Technical-cum-cost Committee (TCC-II) of NMEDT held on 7th and 8th October, 2025 through video conferencing mode

S.no	Name	Designation	Email ID	Contact No	Organization
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19	Mr. Pawan Kumar	Geologist (Field)		-	FAGMIL
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49	Representative			DGM Mizoram	
50	Representative			DGM Jharkhand	
51	Representative			DGM Bihar	

52	Representative			DMG Rajasthan	
53	Representative			M/s GeoExpOre Private Limited	
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