

Ministry of Mines
National Mineral Exploration and Development Trust
Minutes of 9th Joint Meeting of Technical-cum-Cost Committees held on 25th
June, 2026 through video conferencing mode

The 9th Joint meeting of Technical Cum-Cost Committees (TCC-I & TCC-II) of National Mineral Exploration and Development Trust (NMEDT) was held on 25th June, 2026 in VC. The meeting was combined chaired by Dr. S. Ravi, Dy. Director General, Geological Survey of India (GSI) and Chairman, TCC-I and Shri Pradeep Singh, Addl. Director General, Geological Survey of India (GSI) and Chairman, TCC-II.

The list of participants is provided in Annexure-2.

Dr. S. Ravi, Chairman, TCC-I, extended a warm welcome to all members and apprised them of the purpose of the meeting. Shri Pradeep Singh, Chairman, TCC-II, also extended a warm welcome to all members of the committee and participants.

9.1: Technical Evaluation of New Project Proposals along with costing

Agenda 9.1.1. Regional Survey for Evaluation of Placer Minerals (Xenotime, Monazite) – Sabarkantha Block, Gujarat.

[Implementing Agency: M/s Geo Marine Solutions Pvt. Ltd.]

- a. The agency apprised the committee that the block was allocated to them during 8th meeting of Joint TCC for regional survey for evaluation of Placer Minerals.
- b. The proposal is based on the REE-bearing potential of the Godhra Granite catchment, favourable placer-forming geomorphic settings in the Meshwa River Basin, and results from the adjacent Ujol Project, indicating prospectivity of the Sabarkantha Block for REE-bearing placer minerals.
- c. The block dominantly exposes rocks of Neo-Proterozoic granitoids (including REE-bearing Godhra Granite) and Precambrian metasedimentary rocks of the Lunavada Group, providing a favourable geological setting for REE mineralization.
- d. Quaternary alluvial deposits constitute the primary exploration target, with regional structural and geomorphic controls favouring the concentration of REE-bearing placer minerals.
- e. The agency presented an integrated geochemical map depicting the spatial distribution of TREE, Y, and Sc in soil and stream sediment samples. Analysis of 173 stream sediment samples indicated TREE+Y+Sc concentrations ranging from 68.67 ppm to 349.51 ppm, with an average of 135 ppm.
- f. The agency presented a geomorphology map prepared using ASTER DEM, Sentinel-2A, and SRTM DEM and identified point bars, channel bars, palaeochannels, river terraces, flood plains, lower-order stream confluences, and colluvial slopes as favourable geomorphic settings for heavy-mineral concentration, with aeolian dunes acting as secondary dispersion pathways. The agency further informed that these geomorphic environments facilitate hydraulic sorting and concentration of heavy minerals.
- g. The proposal targets REE-bearing placer minerals in fluvial sediments of the Meshwa River Basin derived from the Godhra Granite, with aeolian sand deposits



Dr. S. Ravi
24/07/2026



- and older fluvial terraces identified as secondary targets.
- h. The proposed exploration methodology includes geological and geomorphological data compilation, satellite-based mapping, target delineation, auger sampling (upto 1 m), heavy mineral separation, mineralogical and geochemical analyses (XRD and ICP-MS), GIS-based prospectivity mapping, and identification of areas for further exploration.
 - i. The proposed sample processing workflow comprises size fractionation, heavy media and magnetic/electromagnetic separation, followed by microscopic, XRD, and ICP-MS analyses to characterize REE-bearing heavy minerals and delineate prospective placer zones.
 - j. The Committee observed that auger drilling limited to a depth of 1 m may not adequately evaluate the thickness of point bar and channel bar deposits, and therefore suggested increasing the drilling depth to 5–6 m at selected (10) locations.
 - k. The Committee recommended collection of colluvial samples from the Godhra Granite terrain to assess heavy mineral concentration.
 - l. The Committee further advised collection of composite samples from stream confluence points, followed by comprehensive sieve analysis to estimate heavy mineral concentration.
 - m. The Committee recommended the proposal, with above suggestions.

Recommendations of TCC:

The committee recommended the proposal titled “Regional Survey for Evaluation of Placer Mineral (Xenotime) in Sabarkantha Block, Gujarat” for approval of PSC, NMEDT with an estimated cost of Rs. 145.54 lakhs (including GST) within time schedule of 11 months for carrying out the proposed work and submission of report as per Annexure – 1A & 1B. The item will be reviewed after 3, 6 and 9 months.



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Annexure 1A

Regional Survey for Evaluation of Placer Mineral (Xenotime) in Sabarkantha Block, Gujarat
Area: 675 sq. km, Schedule timeline- 11 months, Review: After 3 and 6 Months & 9 months

S. No.	Item of Work *	Unit *	Rates as per NMEDT SoC 2025		Estimated Cost of the Proposal		Remarks
			SoC-Item No. *	Rates as per SoC * (a)	Qty. (b)	Total Amount (Rs) (a*b)	
A	Geological Mapping Other Geological Work & Surveying						
i	Charges for Geologist per day (Field)	day	1.2.1a	14,500	150	21,75,000	sampling and field check of geomorphic units
ii	Labours Charges; Base rate	day	5.8	556	300	1,66,800	
iii	Charges for Geologist per day (HQ)	day	1.2.1a	10,500	90	9,45,000	1 month for satellite data based geomorphological and drainage basin delineation, 2 months for post field HQ works
iv	Charges for one Sampler per day (1 Party)	one sampler per day	1.2.1b	7,850	70	5,49,500	
v	Labours (4 Nos)	day	5.8	556	280	1,55,680	
	Sub Total- A					39,91,980	
B	DRILLING (In house)						
i	Auger drilling	m	2.2.2.2	3,808	350	13,32,800	1.0 m depth at 300 location and 5.0 m deeper depth sample at 10 locations
ii	Misc. Charges related to drilling	Lumpsum	2.2.9			3,33,200	25% of drilling cost
	Sub Total B					16,66,000	




C	LABORATORY STUDIES						
	<u>Physical & Petrological Studies</u>						
i	Separation of Heavy minerals from streams sediment samples of 2 mm size through gravity and magnetic separation	Nos	4.3.6.b	13,820	350	48,37,000	
ii	Modal analysis	Nos	4.3.7	4,590	88	4,03,920	25% of total samples
iii	Sieve analysis of Composite samples	No.s			15		15 composite samples As per TCC suggestion
iv	Primary samples plus check samples for determination of REE and Trace elements by ICP MS	Nos	4.1.15	7,400	110	8,14,000	100 samples + 10 check samples
v	EPMA studies per hour	per hour	4.4.1	10,500	10	1,05,000	
	Sub Total C					61,59,920	
D	Total A to C					1,18,17,900	
E	Geological Report Preparation		5.2	5.2 (ii)		2,50,000	Reimbursement will be made after submission of the final Geological Report in soft copy to NMEDT.
F	Peer review Charges		As per EC decision			30,000	
G	Preparation of Exploration Proposal (soft copy)		5.1	2% of the Cost or Rs. 5.0 Lakhs whichever is less		2,36,358	EA will be reimbursed after submission of the soft copy of the final proposal along with Maps and Plan as suggested by the TCC-NMEDT in its

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							meeting while clearing the proposal.
H	Total Estimated Cost without GST					1,23,34,258	
I	Provision for GST (18% of H)					22,20,166	GST will be reimbursed as per actual and as per notified prescribed rate
J	Total Estimated Cost with GST					1,45,54,424	
	or Say Rs. In Lakhs					145.54	
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 Item no. 6 of NMEDT 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						
*	SoC Item No. Unit and Rate for each item of work must be as mentioned in the SoC						


24/07/2016



Annexure 1B

Regional Survey for Evaluation of Placer Mineral (Xenotime) in Sabarkantha Block, Gujarat.
Area: 675 sq. km, ; Schedule timeline- 11 months, Review: After 3, 6 & 9 Months

			Month																
S. No.		Months/Days	1	2	3	REVIEW	4	5	6	REVIEW	7	8	9	REVIEW	10	11			
1	Remote Sensing Studies	Months																	
2	Camp Setting	Months																	
3	Geological Field check & Sampling	days																	
4	Auger Drilling	months																	
5	Geologist Man days	days																	
6	Sampler Man days	days																	
7	Camp Winding	months																	
8	Laboratory Studies	Nos.																	
8	Report Writing with Peer Review	months																	

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9.2: Review of Ongoing REE Exploration Projects in Siwana Ring Complex

Agenda 9.2.1. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 1 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: M/s Hindmetal Exploration Services Pvt. Ltd.]

- a. The agency presented the progress of exploration activities in NB-16 and NB-17 blocks, allocated during the second phase of block allocation in the Siwana Ring Complex (SRC), along with the progress of the NB-1 block allocated during the first phase as per agenda.
- b. The agency informed that desktop studies, camp establishment, geological mapping (2 sq. km each at a scale of 1:2000), and drone-based topographic survey and contouring have been completed in all three blocks (NB-1, NB-16, and NB-17). Bedrock sample collection has also been completed, and the samples are under dispatch for analysis. Channel sampling and Phase-I drilling are yet to commence in all the three blocks.
- c. It was further informed that drone-based topographic and DGPS surveys have been completed for NB-1, NB-16, and NB-17, and the generated terrain models will support channel sampling and drill hole planning.
- d. Based on detailed geological mapping and historical geophysical data, channel sampling and drilling programmes have been finalized for all three blocks. 5–6 samples have been planned per channel and accordingly, 26, 25, and 24 bedrock sections (BRS) have been identified in NB-1, NB-16, and NB-17 blocks, respectively, along with collection of approximately 78, 84, and 84 channel samples. 24 BH (3,000 m), 20 BH (2,500 m), and 23 BH (2,875 m) have been planned respectively for planned NB-1, NB-16, and NB-17 blocks.
- e. The agency informed that BH plans for NB-1, NB-16, and NB-17 have been prepared with Phase-I (priority) and Phase-II bore holes, incorporating geological and geophysical inputs, including a low magnetic zone identified in the central part of the NB-1 block.
- f. The agency presented the interpretation of airborne geophysical data, which identified a magnetic-low zone in the central part of NB-1, broad magnetic-high domains in NB-16, and prominent magnetic structural trends across the blocks. Airborne radiometric data indicated high thorium anomalies in NB-16 and NB-17 and a moderate anomaly in NB-1, with thorium anomalies spatially associated with magnetic-low zones, suggesting potential REE mineralization. The agency proposed high-resolution ground magnetic and radiometric surveys to better delineate anomaly boundaries and guide channel sampling and drilling.
- g. The Committee reviewed the progress of work and observed that channel sampling and drilling are yet to commence in all three blocks. The agency was advised to expedite the exploration activities.


24/07/2016



- h. The Committee noted that more than 70% of the project area is covered by alluvium/sand and that the thickness of the overburden has not yet been established.
- i. The Committee recommended that Phase-I drilling be prioritized in areas with exposed bedrock or proximal to rock outcrops. Drilling in the remaining areas may be planned after completion of the ground geophysical survey and assessment of overburden thickness.

Recommendations of TCC:

The agency can initiate 1st phase drilling in all the three blocks, viz. NB-1, NB-16 and NB-17 as suggested by committee.

Agenda 9.2.2. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 2 block (2 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: M/s Mining Tech Consultancy Services Limited]

- a. The agency informed that the project was approved by PSC in its 3rd meeting. The Sanction Order was issued on 09.01.2026 at a cost of ₹6.27 crore (including GST) with a project duration of 12 months, scheduled for completion by 08.01.2027.
- b. The agency informed that all requisite statutory intimations to GSI, DMG Rajasthan, the District Magistrate, and the Tehsildar have been completed. The proposal seeking confirmation of forest area and issuance of NOC has been submitted to the PCCF and DCF, Barmer, as well as through the Rajasthan Forest Department FMDSS Portal, and approval is awaited.
- c. The agency informed that geological data compilation, reinterpretation of existing geophysical data, remote sensing analysis, and drone-based topographic survey have been completed, while ground magnetic survey, Phase-I drilling, and sample collection in non-forest areas are underway. The Committee's guidance was sought on the proposed borehole plan.
- d. The agency presented the regional geological framework of the Trans-Aravalli region and highlighted that prior GSI mapping within the NB-2 block had delineated multiple rhyolitic lava flows and felsic dykes, indicating favourable geological conditions for mineral exploration.
- e. The agency presented the reinterpretation of aeromagnetic data, including processed magnetic maps, source-depth estimation, and magnetic lineament analysis, to delineate subsurface structures and identify priority exploration targets.
- f. The agency presented the processing and interpretation of ground gravity data, including Bouguer anomaly analysis, source-depth estimation, derivative maps, and lineament extraction to delineate subsurface structures.
- g. Radiometric data (K, eU, and eTh) and ratio maps were interpreted by agency to identify uranium- and thorium-bearing anomalies and potassic alteration zones, which may be indicative of REE mineralization.
- h. The agency presented remote sensing-based lithological, land use/land cover, and geomorphological mapping, which indicates sparse vegetation, predominantly wasteland/current fallow terrain, and a pediment–pediplain setting with structurally controlled hilly terrain and locally exposed bedrock, favourable for exploration.




- i. The agency further informed that preliminary geological mapping indicates that the block is predominantly sand-covered with felsic ridges, comprising two propylitic rhyolite flows, felsic and mafic dykes, and prominent N–S and NE–SW joint sets, while detailed geological mapping is in progress.
- j. The Committee reviewed the progress of work and observed that geological mapping and surface sampling are yet to be completed. The Committee noted that the overall progress of the project has been unsatisfactory and expressed its concern over the slow pace of exploration activities.
- k. The committee noted that the agency did not present their drilling plan in the meeting.
- l. The Committee instructed the agency to present and discuss the proposed drilling plan with the Committee before commencing drilling activities.

Recommendations of TCC:

The Committee instructed the agency to present and discuss the proposed drilling plan with the Committee before commencing drilling activities.

Agenda 9.2.3. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 3 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: M/s United Exploration India Pvt. Ltd.]

- a. The agency informed that Phase-I desktop studies, geological mapping (2.00 sq. km), and topographic survey have been completed. Chemical analyses and petrographic studies are in progress, while trenching, DGPS survey, and drilling are pending due to the non-receipt of forest clearance.
- b. The agency further informed that the application for forest clearance was submitted through the PARIVESH portal, and approval is awaited after compliance with the EDS raised during the processing of the proposal.
- c. The agency presented the integrated interpretation of aeromagnetic and aeroradiometric data, which identified the southern part of the NB-3 block as the highest priority exploration target due to favourable magnetic, structural, and radiometric signatures indicative of REE and associated rare-metal mineralization, while the central and northern parts were delineated as moderate to secondary priority targets.
- d. Detailed geological mapping and topographic contouring (1:2,000 scale) have been completed over the 2 sq. km area, delineating rhyolite, granitoid, tuff/pyroclastic units, mafic dykes, and aeolian sands within a polyphase magmatic setting of the Malani Igneous Suite, with lithological contacts, geomorphological features, and structural trends mapped.
- e. The agency further summarized that Integrated geological and geophysical investigations identified the southern part of the NB-3 block, characterized by favourable magnetic, structural, and lithological features, as the most prospective zone for REE and associated rare-metal mineralization, while the sand-covered northern part has been identified as a potential subsurface exploration target.
- f. The agency further sought enhancement of magnetic survey points.


24/07/2024



- g. The Committee reviewed the progress of work and advised that a uniform approach be adopted for the magnetic survey across all Siwana Ring Complex (SRC) blocks. The agencies were further instructed to maintain close coordination among themselves and with GSI, Jaipur, to ensure consistency in data acquisition and interpretation.
- h. The Committee advised the agency to coordinate with GSI, Jaipur, incorporate the suggestions arising from the discussions, and present the revised proposal during the next review.
- i. The Committee clarified that the agency may present the revised proposal for review before either TCC-I or TCC-II, without waiting for a Joint TCC meeting.

Recommendations of TCC:

The Committee advised the agency to coordinate with GSI, Jaipur, incorporate the suggestions arising from the discussions, and present the revised proposal during the next review.

Agenda 9.2.4. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 5 block (1.98 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: M/s GeoExpore Pvt. Ltd.]

- a. The agency informed that Phase-I geological mapping, bedrock sampling, and channel sampling have been completed, while geophysical studies, trenching, DGPS survey, drilling, and laboratory investigations are at various stages of progress.
- b. The agency presented the integrated interpretation of radiometric and magnetic data, which identified two priority target zones (T-A and T-B) characterized by coincident radiometric and magnetic anomalies, with the southern magnetic gradient interpreted as the ring-margin contact, indicating favorable targets for REE mineralization.
- c. Detailed geological mapping delineated multiple rhyolitic flows, associated volcanic and intrusive lithologies, and structural features including faults, veins, and slickensides, supported by traverse, outcrop, contour, and geological maps for exploration planning.
- d. The agency presented the geochemical results of 30 bedrock and 45 channel samples, wherein 43 samples (57%) recorded TREE values exceeding 1,000 ppm. The highest REE concentrations were associated with Rhyolite Flows 15 and 17, identifying these units as the most prospective targets for further exploration.
- e. The agency further presented the geochemical results, indicating that 73% of the channel samples recorded TREE values exceeding 1,000 ppm, with a maximum of 4,712.06 ppm, confirming widespread REE enrichment. The agency further apprised the committee that REE system is predominantly LREE-dominated, with cerium as the principal contributor, corroborating bedrock-derived mineralization and delineating high-priority target zones for follow-up exploration.
- f. The agency presented the revised Phase-I borehole plan based on field


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observations and target prioritization, and informed the Committee that drilling has commenced at BH-1 and BH-2.

- g. The Committee reviewed the progress of work and expressed satisfaction with the overall progress. After examining the revised borehole plan, the Committee suggested that, if feasible, BH-4 may be shifted further south.
- h. The Committee advised the agency to complete the chemical analysis of surface samples concurrently with drilling, as the analytical results would provide better control for planning subsequent boreholes.

Recommendations of TCC:

The Committee suggested that, if feasible, BH-4 may be shifted further south. The Committee also advised the agency to complete the chemical analysis of surface samples concurrently with drilling, as the analytical results would provide better control for planning subsequent boreholes.

Agenda 9.2.5. Preliminary Exploration (G3) for REE and associated critical minerals in the modified NB 9 and NB 10 block (2.85 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: Mineral Exploration and Consultancy Ltd.]

- a. MECL informed the Committee that the drilling plan had already been approved during the 8th Joint Meeting of TCC-I and TCC-II.
- b. The agency further informed the Committee that the first tender for outsourcing of drilling was unsuccessful due to the participation of only a single bidder.
- c. The agency informed the Committee that the second tender for outsourcing the drilling work is under process. In the event that the second tender is also unsuccessful, the drilling will be undertaken in-house.
- d. The Committee decided that the project would be reviewed after the commencement of drilling activities.

Recommendations of TCC:

The Committee decided that the project would be reviewed after the commencement of drilling activities.

Agenda 9.2.6. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 11 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: FCI Aravali Gypsum and Minerals India Limited]

- a. The agency informed that the NB-11 block was allocated for G3-level exploration following approval by the 5th Joint TCC and the 3rd PSC. The Committee was also informed that, during the 8th Joint TCC, the agency had been advised to undertake comprehensive compilation and integration of geological and geophysical data
- b. The agency informed that rock exposures are limited to about 0.1 sq. km of the block, with the remaining area covered by alluvium. Geological mapping has



identified seven rhyolitic flows trending ENE–WSW to E–W with predominantly southerly dips.

- c. The agency presented the geochemical characteristics of the rocks, which are classified predominantly as rhyolite, trachyte, trachyandesite, and dacite, belonging to the high-K calc-alkaline to shoshonite series.
- d. The agency further apprised the committee that geochemical results indicate TREE (including Y and Sc) values ranging up to 3,354 ppm with an average of 2,059 ppm. The REE mineralization is predominantly LREE-enriched, with the highest concentrations recorded in Flows 18, 19, and 21.
- e. The agency presented DEM, slope, and hillshade analyses, which indicate that the NB-11 block occupies a structurally controlled, gentle-sloping geomorphic corridor bounded by rhyolitic and granitic ridges of the Siwana Ring Complex, with a localized rhyolitic topographic high in the southwestern part of the block.
- f. The agency presented a multi-parameter weighted model for estimating soil/regolith thickness, integrating geomorphological, geophysical, and remote sensing parameters, and informed that the model was validated using GSI borehole data.
- g. The agency presented the integrated interpretation of magnetic and radiometric data, which delineated concealed structural contacts, localized magnetic anomalies, and thorium-enriched zones, identifying the central and southwestern parts of the NB-11 block as the most prospective targets for structurally controlled REE mineralization.
- h. The agency presented an integrated interpretation of geological, geophysical, geochemical, and remote sensing data, which identified the western–central part of the NB-11 block as the primary REE exploration target and the northeastern part as a secondary target, based on coincident structural, magnetic, radiometric, and shallow-source anomalies.
- i. The Committee reviewed the progress of work and noted that all proposed boreholes have been located within exposed rock outcrops and that the borehole plan has been prepared based on the distribution of rock exposures.
- j. The Committee observed that lithological information from existing dug wells and available GSI borehole data, if any, had not been considered while preparing the exploration plan.
- k. The Committee suggested that the agency prepare the borehole plan on a 200 m × 400 m grid pattern, in consultation with GSI, Jaipur and then come for review.
- l. The Committee clarified that the agency may present the revised proposal for review before either TCC-I or TCC-II, without waiting for a Joint TCC meeting.

Recommendations of TCC:

The Committee advised the agency to coordinate with GSI, Jaipur, incorporate the suggestions arising from the discussions, and present the revised BH plan during the next review.

Agenda 9.2.7. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 12 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan


24/07/2016



[Implementing Agency: Natural Resource Division, Tata Steel Ltd.]

- a. The NB-12 block, covering an area of 2.0 sq. km within the Siwana Ring Complex (SRC), Rajasthan, was allocated to the agency for G3-level exploration of Rare Earth Elements (REE) and Rare Metals (RM). The Committee reviewed the progress of work during 8th meeting of Joint TCC and recommended initiating Phase-I drilling comprising five boreholes each in the NB-12 block.
- b. The agency informed that Phase-I desktop studies, geological mapping, topographic survey, and bedrock sampling have been completed. Chemical analysis of surface samples is in progress, while Phase-I drilling has commenced with one borehole (150 m) completed. Phase-II geophysical investigations, drilling, laboratory studies, and geological report preparation are yet to be taken up.
- c. The agency informed that core logging is in progress, following which core splitting, sampling, and chemical analysis will be undertaken. The results of Phase-I drilling and laboratory investigations will be presented before the Joint TCC for review and guidance on subsequent exploration activities.
- d. The agency informed the Committee that a handheld XRF will be used to obtain preliminary geochemical data for lithological identification prior to submitting samples for detailed chemical analysis.
- e. The Committee reviewed the progress of work and advised that the handheld XRF should not be used directly on the core surface. Instead, the core should first be split, the representative sample crushed to approximately -80 mesh, and the handheld XRF analysis carried out on the prepared sample.
- f. The Committee further instructed that the sample interval/length should be kept uniform within each flow and harmonized with the sampling intervals adopted in the adjacent blocks.
- g. The Committee further advised the agency to consult with GSI, Jaipur, and undertake the exploration activities in accordance with the technical guidance provided by GSI.
- h. The Committee informed the agency that the scope and programme of Phase-II activities would be decided after completion of the Phase-I work and review of its results.

Recommendations of TCC:

The Committee recommended that the scope and programme of Phase-II activities be finalized only after completion of the Phase-I work and review of the results thereof.

Agenda 9.2.8. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 13 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: Natural Resource Division, Tata Steel Ltd.]

- a. The NB-13 block, covering an area of 2.0 sq. km within the Siwana Ring Complex (SRC), Rajasthan, was allocated to the agency for G3-level exploration of Rare

Earth Elements (REE) and Rare Metals (RM). The Committee reviewed the progress of work during 8th meeting of Joint TCC and recommended initiating Phase-I drilling comprising five boreholes each in the NB-13 block.

- b. The agency informed that Phase-I desktop studies, geological mapping, topographic survey, and bedrock sampling have been completed. Chemical analysis of surface samples is in progress, while Phase-I drilling has progressed with two boreholes completed (591 m). Phase-II geophysical investigations, drilling, laboratory studies, and geological report preparation are yet to commence.
- c. The agency informed that core logging is in progress, following which core splitting, sampling, and chemical analysis will be undertaken. The results of Phase-I drilling and laboratory investigations will be presented before the Joint TCC for review and guidance on subsequent exploration activities.
- d. The agency informed the Committee that a handheld XRF will be used to obtain preliminary geochemical data for lithological identification prior to submitting samples for detailed chemical analysis.
- e. The Committee reviewed the progress of work and advised that the handheld XRF should not be used directly on the core surface. Instead, the core should first be split, the representative sample crushed to approximately –80 mesh, and the handheld XRF analysis carried out on the prepared sample.
- f. The Committee further instructed that the sample interval/length should be kept uniform within each flow and harmonized with the sampling intervals adopted in the adjacent blocks.
- g. The Committee further advised the agency to consult with GSI, Jaipur, and undertake the exploration activities in accordance with the technical guidance provided by GSI.
- h. The Committee informed the agency that the scope and programme of Phase-II activities would be decided after completion of the Phase-I work and review of its results.

Recommendations of TCC:

The Committee recommended that the scope and programme of Phase-II activities be finalized only after completion of the Phase-I work and review of the results thereof.

Agenda 9.2.9. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 14 block (2.42 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

[Implementing Agency: M/s Gemcokati Exploration Pvt. Ltd.]

- a. The agency informed that Phase-I topographical survey, geological mapping, reinterpretation of geophysical data, drilling (800 m), bedrock sampling, core sampling, and most laboratory investigations have been substantially completed. Phase-II geophysical survey, drilling, trenching, and the remaining laboratory studies are yet to be undertaken.
- b. The agency presented the interpretation of airborne magnetic and radiometric data,



which delineated magnetic anomalies, structural lineaments, and radiometric signatures (U, Th, and K) indicative of hydrothermal alteration, structural controls, and potential REE mineralization.

- c. Based on the integrated geophysical interpretation, the central and northern parts of the NB-14 block were identified as the most prospective exploration targets, with major structural contacts and magnetic breaks interpreted as favourable conduits for REE-bearing mineralizing fluids.
- d. The agency presented the geochemical results of 62 bedrock samples, wherein ICP-MS analysis indicated TREE concentrations ranging from 102.3 ppm to 7,342.2 ppm, along with analyses of associated rare metals, identifying several surface samples with TREE values exceeding 1,000 ppm.
- e. The agency presented the results of five Phase-I boreholes, wherein TREE concentrations ranged from 121.92 ppm to 4,958.42 ppm.
- f. The Committee observed that the Phase-I borehole planning was not appropriate, as all five boreholes were drilled in exposed rock areas. The Committee opined that at least three of the five Phase-I boreholes should have been located in soil-covered areas. It was further noted that the agency had undertaken drilling without obtaining prior review and approval of the borehole plan by the Committee.
- g. The Committee advised the agency to undertake detailed mapping in the soil-covered areas to estimate the thickness of the overburden and, based on the findings, plan the geophysical survey accordingly.
- h. The Committee advised the agency to visit GSI, Jaipur, review the available geological and exploration data, and hold detailed consultations to finalize the strategy for the subsequent stages of exploration.

Recommendations of TCC:

The Committee advised the agency to visit GSI, Jaipur, review the available geological and exploration data, and hold detailed consultations to finalize the strategy for the subsequent stages of exploration.

Agenda 9.2.10. Preliminary Exploration (G3) for REE and associated critical minerals in the NB 15 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan

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

- a. The agency apprised the committee that the study area comprises eight rhyolitic flows (Flows 12–15 and 25–28) with minor felsic dykes and extensive aeolian sand cover. The rhyolite flows trend NE–SW with gentle SE dips and preserve primary igneous features, while a basaltic mound indicates multiple phases of volcanic activity.
- b. The agency further informed that all planned Phase-I geological mapping, surface sampling, and geochemical analyses had been substantially completed, while two of the five approved boreholes had been drilled. Petrographic, XRD, and check-sample analyses are yet to be undertaken.
- c. The agency presented the geochemical results of bedrock, trench, and channel

samples, wherein channel samples recorded the highest average TREE+Y values, with a maximum of 3,611.74 ppm. Flow-wise analysis identified Flow 25 and Flow 15 as the most prospective REE-bearing units, recording anomalous average TREE+Y concentrations exceeding 1,500 ppm.

- d. The agency informed that two of the five approved Phase-I boreholes (250 m) had been completed, and the lithologs indicate rhyolitic units beneath a thin overburden, characterized by flow banding, vesicular textures, calcite infillings, and iron oxide alteration.
- e. The agency presented the interpretation of reprocessed GSI airborne magnetic and radiometric datasets, which delineated major ENE–WSW/E–W structural trends, lithological contacts, and shallow magnetic sources associated with the Siwana Ring Complex.
- f. Integrated radiometric interpretation identified favourable K, Th, and U anomalies, along with hydrothermal alteration zones and structurally controlled corridors indicative of REE mineralization potential.
- g. Based on the integrated geophysical interpretation, seven prospective REE target zones (Z-1 to Z-7) were delineated, of which Zones Z-1, Z-3, Z-6, and Z-7 were prioritized for follow-up exploration owing to the coincidence of magnetic anomalies, Th-U enrichment, and structural control.
- h. The Committee reviewed the progress of work and advised the agency to consult GSI regarding the appropriate methodology for collection and preparation of core samples for geochemical analysis.
- i. The Committee further instructed the agency to complete the remaining Phase-I drilling and, thereafter, discuss the geochemical analytical results with GSI, Jaipur to delineate prospective mineralized zones and refine the subsequent exploration strategy.
- j. The Committee advised the agency to present the project for review after the analytical results become available and to finalize the geophysical survey plan based on the interpreted results.

Recommendations of TCC:

The Committee further instructed the agency to complete the remaining Phase-I drilling and, thereafter, discuss the geochemical analytical results with GSI, Jaipur to delineate prospective mineralized zones and refine the subsequent exploration strategy.

Agenda 9.2.11. Preliminary exploration (G3) for REE and associated critical minerals in the NB 18 block (2.00 sq. km) of the northern part of the Siwana Ring Complex, District-Balotra, Rajasthan
[Implementing Agency: Natural Resource Division, Tata Steel Ltd.]

- a. The agency informed that the NB-18 block is predominantly sand-covered (~83%) and comprises four rhyolite flows (Flows 14–17). Previous GSI bedrock samples from the block recorded REE values ranging from 571 to 2,650 ppm, with the higher values associated mainly with Flows 16 and 17.



- b. The agency informed that detailed geological mapping, drone-based topographic survey, and bedrock sampling have been completed, while chemical analysis of the collected samples is in progress. In view of the extensive sand cover (~83%), trenching and channel sampling have been avoided, and approval was sought for drilling five Phase-I boreholes.
- c. The agency presented the interpretation of GSI airborne magnetic and radiometric datasets (NGDR), which delineated prominent NE–SW-trending magnetic anomalies, lithological contacts, and structurally disturbed zones with cross-cutting breaks, indicating favourable targets for REE mineralization.
- d. Integrated radiometric interpretation identified coincident high U, Th, and K anomalies, along with favourable Th/U and Th/K ratio anomalies, particularly in the eastern and south-eastern parts of the block, suggesting potential REE-bearing zones for follow-up exploration.
- e. The agency integrated magnetic and radiometric datasets to delineate two prospective REE target zones (NB-18-1 and NB-18-2), characterized by high Th/U, low U/K anomalies, and NE–SW-trending magnetic lineaments disrupted by NW–SE structural breaks, indicating favourable conditions for REE mineralization.
- f. The agency presented the geochemical results of 51 bedrock and channel samples (from exposed lithounits), wherein average TREE values of 1,446 ppm were recorded across different lithologies. The highest REE enrichment was observed in felsic dykes, mafic veins, and Flows 15–17, which also exhibited elevated concentrations of associated rare metals such as Zr and Nb.
- g. Based on the integrated interpretation of geological, geophysical, and geochemical data, the agency identified two prospective target zones (NB-18A and NB-18B) and proposed five Phase-I boreholes, including three within the identified target zones and two in data-deficient areas to establish subsurface lithology and guide Phase-II drilling.
- h. The Committee reviewed the progress of work and advised that trenching may be undertaken only in areas where the soil cover is thin and bedrock can be accessed effectively.
- i. The Committee approved the proposed Phase-I drilling plan submitted by the agency.

Recommendations of TCC:

The Committee approved the proposed Phase-I drilling plan submitted by the agency.

9.3: Review of Ongoing Regional Mineral Targeting Projects

Agenda 9.3.1. Regional Mineral Targeting and integrated mineral system studies to target potential mineralization in Proterozoic rocks of Amgaon Gneissic Complex, Dongargarh Granites, Dongargarh Supergroup, Bijli Rhyolite, Bailadila Group, in parts of Kanker, Rajnandgaon and Narayanpur Districts, Chhattisgarh

[Implementing Agency: United Exploration India Pvt. Ltd.]

- a. The agency informed that that the project area lies within the Bastar Craton and comprises Archean–Proterozoic granites, volcanic rocks, gneisses and supracrustal sequences, providing a favourable geological setting for diverse mineralization.
- b. Phase-I studies involved integration of geological, geophysical, aeromagnetic, aeroradiometric and remote sensing datasets to prepare factor and mineral prospectivity maps, resulting in the delineation of an overall multi-commodity potential zone and three prospective blocks covering 214 sq. km, 267 sq. km and 103 sq. km for Li, REE and Cu–Au mineralization.
- c. The agency informed the committee that in IInd phase of work, 272.3 sq. km of geological mapping had been completed against a target of 900 sq. km, with 130 bedrock samples collected. Sample preparation and laboratory investigations, including major oxide (XRF), ICP-MS, petrography and ore microscopy, are in progress, and the mapped area comprises granodiorite, granite, laterite, quartzite, basalt, quartz vein, fuchsite quartzite and BIF.
- d. The agency informed the committee that newly identified granodiorite patches and fuchsite quartzite (a hydrothermal alteration indicator) intruded within granite will be incorporated into the refinement of the Cu–Au and REE prospectivity zones.
- e. Elevated Ga, Zn and Sc concentrations identified from the 64D/14 NGCM dataset will be correlated with the ASTER-derived alteration and prospectivity maps to further refine the prospective zones.
- f. The Committee reviewed the progress of work and noted that the prospective areas have been delineated primarily on the basis of remote sensing data. The Committee recommended that the agency integrate all available geological, geochemical, geophysical and remote sensing datasets, and apply appropriate spectral bandwidths to generate and refine alteration maps for more robust delineation of prospective zones.
- g. The Committee further recommended that the agency delineate magnetic domains using the available magnetic data and interpret the identified domains to better understand the geological framework and mineralization potential.
- h. The Committee further recommended that the agency complete the stream sediment sampling to delineate mineralized zones, and thereafter undertake systematic Bedrock (BRS) sample collection in the identified target areas.

Recommendations of TCC:

The Committee recommended that the agency integrate all available datasets to refine the delineation of prospective zones, complete the planned field investigations and laboratory studies, proceed further as suggested by committee, and present the updated mineral prospectivity assessment in the next TCC meeting.

Agenda 9.3.2. Regional Mineral Targeting in Madanpur-Rampur-Kankatru areas to identify prospective blocks of REE, Base Metal & other mineralization in Kalahandi District, Odisha

[Implementing Agency: Natural Resource Division, Tata Steel Ltd.]

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- a. The Committee was informed that the Phase-I (remote sensing study, dataset collation/integration, and thematic map preparation) has been completed and reviewed during 8th Joint TCC meeting.
- b. The agency apprised the committee that two REE prospective zones (covering approximately 394 sq. km.) have been identified for field validation, involving quick traverses, geological mapping, structural observations, and systematic sample collection for chemical and petrographic analysis.
- c. The agency further informed that the Phase-II field traverses and sample collection have been completed, while data synthesis, sample selection for laboratory studies, and interpretation are in progress; additional mapping and sampling, if required, will be undertaken based on the analytical results.
- d. The Committee reviewed the progress of work and advised the agency to undertake stream sediment sampling in the anomalous zones to delineate target areas for Bedrock (BRS) sample collection.

Recommendations of TCC:

The Committee recommended that the agency undertake stream sediment sampling in the anomalous zones to delineate target areas for Bedrock (BRS) sample collection and proceed with the proposed plan of action accordingly.

Agenda 9.3.3. Regional Mineral Targeting in parts of AMGC and associated granites for identification of prospecting blocks in West Khasi Hills and East Garo Hills Districts, Meghalaya

[Implementing Agency: MMPL Pvt. Ltd.]

- a. The Committee was informed that Phase-II work was undertaken based on the recommendations of the previous TCC review and comprised reconnaissance traverses, surface geochemical sampling (stream, soil and bedrock), trenching/pitting, laboratory investigations (chemical, physical and petrological studies), and predictive analysis to identify targets for the next phase of exploration.
- b. The Committee was apprised that reconnaissance surveys and surface sampling are being undertaken to validate the Phase-I geochemical anomalies, with 1,630 sq. km (≈90%) of the 1,900 sq. km anomalous area covered; of the 200 approved BRS/pit/trenching samples, 85 have been analysed and 60 are under analysis.
- c. The agency apprised the committee about the occurrence of magnetite-bearing rocks (VTM) and Banded Magnetite Quartzite (BMQ) exposures at Myniar, Awsit and Nongjri, indicating potential iron mineralization within the area.
- d. Presence of porphyritic and alkali granites, sillimanite schist, granite gneiss with cordierite, and limestone with Mahadek Sandstone containing pyrite nodules and coal patches, also reflects a diverse geological setting.
- e. Occurrence of arsenopyrite-bearing gossan zones near Umdang village, suggest hydrothermal alteration and potential sulphide mineralization warranting detailed investigation.
- f. The analytical results received so far indicate promising magnetite and REE mineralization, with Fe₂O₃ values up to 61.25% and TREE concentrations ranging from 33.6 to 2,051.1 ppm.
- g. The Committee reviewed the progress of work and recommended that the agency undertake a block-wise evaluation of the delineated mineralized zones and assess the mineral potential of each block, and present the findings along with the proposed


24/07/2016



- exploration strategy in the next TCC meeting.
- h. The Committee further recommended that the agency expeditiously complete the remaining geological mapping, pitting, trenching, and laboratory analysis of the collected samples.

Recommendations of TCC:

The Committee recommended that the agency complete the pending mapping, pitting, trenching and sample analyses, undertake a block-wise assessment of the delineated mineralized zones, and present the mineral potential and way forward in the next TCC meeting.

Agenda 9.3.4. Regional Mineral Targeting for Manganese, Graphite, Tungsten, Cobalt, REE and associated critical minerals in parts of Alluri Sitharama Raju District, Andhra Pradesh

[Implementing Agency: Critical Mineral Tracker]

- a. The Committee was informed that Phase-I work involved the collation and integration of geological, geochemical, geophysical, airborne and remote sensing datasets, including ASTER-based alteration mapping, lineament analysis, gravity and magnetic interpretation, and NGCM geochemical anomaly assessment.
- b. Based on the integrated analysis and preliminary field verification, the agency delineated prospective zones for laterite-hosted Al–Ga–V–Ti mineralization and structurally controlled REE, Mn, Graphite and Tungsten mineralization, supported by confirmed lithological observations.
- c. The Committee was further apprised that Phase-II traverse mapping (1:25000 scale) has been completed over 543.75 sq. km of Toposheet 65K/5, leading to the identification of additional lithological units and collection of 100 bedrock/stream sediment samples, of which 67 have been submitted for laboratory analysis and 33 are ready for dispatch.
- d. The Committee noted that 181.25 sq. km of the 65K/5 SW sector and the entire 65K/1 sheet remain to be covered, while petrographic and ore-micrographic studies are yet to be initiated.
- e. The agency further apprised the Committee that field/traverse work has remained suspended since 18.06.2026 due to resistance from local tribal communities, and that the local administration is addressing the issue, following which field activities will be resumed.
- f. The committee reviewed the project and suggested the agency to coordinate with State Govt. authorities to resolve the local issue and then proceed with work.

Recommendations of TCC:

The committee suggested the agency to coordinate with State Govt. authorities to resolve the local issue and then proceed with work.

Agenda 9.3.5. Regional Mineral Targeting (RMT) to identify prospective zones of Base-metals, REE and other associated critical minerals in Chandrapur, Wardha and Nagpur districts of Maharashtra

[Implementing Agency: M/s Mining Tech Consultancy Services Limited]

- a. The Committee was informed that the initial RMT block area of 2,887.20 sq. km., based on coordinates provided by GSI, included a portion of SOI toposheet Nos.


24/07/2026



- 55P/3 and 55P/7 falling within the Tadoba Tiger Reserve. Accordingly, the RMT area was revised and restricted to 1,973 sq. km., excluding the Tiger Reserve area.
- b. The agency further apprised the committee that the RMT block forms part of the Western Bastar Craton and is underlain by a stratigraphic succession comprising Deccan Volcanics, Lameta Group, Lower Gondwana, Penganga Group, and Precambrian basement rocks, indicating a geologically diverse terrain.
 - c. The agency informed that the review of 15 legacy exploration reports (1961–2018), indicated the presence of chromite, gold, zinc, tungsten (scheelite), copper-gold, and polymetallic mineralization within the RMT block, while no lamproite/kimberlite was reported.
 - d. Geospatial analysis, indicates favourable terrain and exploration accessibility, with DEM- and remote sensing-derived structural lineaments and hydrothermal alteration zones suggesting potential mineralized targets for further investigation.
 - e. The agency informed that geochemical analysis, including correlation matrix and PCA, identified distinct elemental associations indicative of REE, base metal, mafic-ultramafic, and hydrothermal mineralization within the RMT block.
 - f. Elevated concentrations of Cu, Cr, Ni, Co, Pb, Zn, REE and TiO_2 , significantly exceeding average crustal abundances, were observed, with mineralization linked to meta-ultramafites, Lower Gondwana sandstones, and Deccan basalts.
 - g. The agency further informed that REE spider plot and borehole data indicate LREE enrichment, evolved felsic magma affinity, and structurally controlled chromite-base metal mineralization, highlighting favourable targets for further exploration.
 - h. The agency informed that the geophysical data (NGPM and partial NAGMP coverage) delineate prominent magnetic and gravity anomalies, indicating mafic-ultramafic intrusions, basement structures, and lineaments favourable for mineralization.
 - i. Airborne and ground geophysical datasets further suggest structural controls, basement uplifts, and possible intrusive bodies, corroborating the geochemical anomalies and identifying priority targets for follow-up exploration.
 - j. The Committee was apprised that mineral prospectivity mapping identified high-prospectivity zones for REE, base metals (Pb–Zn, Cu) and Ni–Cr, with a prominent multi-element mineralization zone in the northeastern part of the block, warranting ground validation and follow-up exploration.
 - k. The committee reviewed the progress of work and noted that the agency has not started field work yet.
 - l. The agency was advised to undertake field validation through ground truthing, sample collection and analysis to confirm REE, Ni–Cr and Cu–Pb–Zn mineralization, and to delineate the potential mineralized zones.
 - m. The agency was advised to prefer channel sampling over grab sampling and to undertake systematic traverses across the remaining areas, in addition to the demarcated potential zones.
 - n. The Committee advised the agency to undertake ground validation and present the results in a subsequent review meeting to discuss the way forward for the project.

Recommendations of TCC:

The agency was instructed to undertake field validation through ground truthing, sample collection and analysis to confirm and delineate the potential mineralized zones.

Agenda 9.3.6. Regional Mineral Targeting and integrated mineral system



studies for identification of prospective blocks for Graphite, Niobium, REE and associated mineralisation in Yellikod-Azhikod areas, near Achankovil shear zone, Southern Granulite Terrain, Kerala and Tamil Nadu

[Implementing Agency: M/s Geo Marine Solutions Pvt. Ltd.]

- a. The agency informed that the project is progressing as per the approved timeline, with Phase-I completed and Phase-II currently under implementation.
- b. The Committee noted that sample collection has exceeded the approved targets, with 230 bedrock samples and 154 surface/soil samples collected, while XRF, ICP-MS and petrographic studies are progressing, with 79 samples analysed by XRF, 120 samples analysed by ICP-MS (along with 80 additional samples under process), and 40 polished thin sections completed.
- c. The agency apprised the Committee of field identification of laterite, syenite and crystalline graphite-bearing lithologies, including newly identified syenite bodies in the Marthandam and Neyyoor areas, indicating favourable geological settings for further evaluation.
- d. Further, stream sediment sampling was carried out in the Neyyar River basin, and graphite-bearing rocks with associated pegmatites were identified in the Vellnad-Changa area.
- e. The agency informed that geochemical analyses of 79 bedrock samples indicate encouraging REE mineralization, with TREE+Y+Sc values ranging from ~14 to 3,537 ppm, including several samples exceeding 1,000–2,000 ppm, particularly within granitoid lithologies. Further, the analysed samples show significant enrichment of LREE and critical REEs (including La, Ce, Nd and Y), highlighting the potential for economically significant REE mineralization in the project area.
- f. The agency further informed that the geochemical analysis of 39 soil samples also indicates significant REE enrichment, with TREE+Y+Sc values reaching ~1,750 ppm and LREE values up to ~1,662 ppm, confirming the REE potential delineated from the bedrock samples.
- g. The agency further informed about the occurrence of crystalline graphite in the Vellnad area, with Fixed Carbon (FC) values up to 91.56%, indicating high-grade graphite mineralization.
- h. The Committee reviewed the progress of work and recommended that the agency establish the structural controls governing graphite mineralization to better delineate the prospective zones. The Committee also observed that grab samples may yield anomalously high values and advised that the assessment should be supported by systematic and representative sampling.

Recommendations of TCC:

The Committee recommended that the agency establish the structural controls governing graphite mineralization, complete the remaining Phase-II investigations, and present the results for review to facilitate a decision on the Phase-III programme.

Agenda 9.4: Preservation of BH Cores of NPEAs in GSI Core Repository

The agenda was not discussed and deferred to next meeting of Joint TCC.



Agenda 9.5: Standardisation of ICPMS Analysis being carried out

The agenda was not discussed and deferred to next meeting of Joint TCC.

Agenda 9.6: Discussion on requisition made by CGM Gujarat for re-sampling along with GSI in Ujol River Basin.

- a. The committee was apprised that during 8th meeting of Joint TCC, discrepancies in Chemical Analysis Data of Ujol Project as reported by CGM, Gujarat was discussed.
- b. After thorough discussion, the committee had recommended that samples in which discrepancies were noted may be analysed again for verification. The samples would be collected from same coordinates by Geovale Services Pvt. Ltd. along with officers from GSI. The collected samples would be processed and analysed by GSI. The analytical results are to be submitted to NMEDT for review in TCC.
- c. Following the recommendations of TCC, NMEDT, CGM Gujarat has given a representation for inclusion of State Government representatives in the resampling procedure of Ujol River Basin to ensure transparency, joint retention of samples, and conformity with state regulatory frameworks.
- d. **The Committee deliberated on the issue and opined that, GSI will be requested for re-sampling and analysis in accordance with the prescribed procedures. The analytical results shall be submitted to NMEDT for review by the TCC.**

Agenda 9.7 (Addl.): Discussion on overlapping of NMEDT approved regional sub surface screening block allocated by NMEDT with AMD notified block.

- a. The committee was informed that 3 projects titled "Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block A)", Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block B) and Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block C) encompassing an area of about 330 sq. km has been allotted to NPEAs for regional geological and geophysical study.
- b. The chronological sequence of the events are as follows:
 1. A comprehensive exploration plan for Siwana Ring Complex was submitted to NMEDT by DDG, PSS, P&M, GSI on 30.03.2026.
 2. As per the area demarcated by GSI, 3 blocks were delineated for regional study (including geophysical studies and drilling).
 3. The blocks were allocated to NPEAs and project was recommended by Joint TCC in its 8th Meeting, held on 17th, 22nd and 27th April, 2026.
 4. On the recommendations of Joint TCC, the project was approved by PSC, NMEDT in its 8th meeting held on 30.04.2026.
 5. The minutes of 8th PSC meeting was circulated on 06.05.2026 and sanction order was issued on 19.05.2026.
 6. The additional area was notified to AMD by DMG Rajasthan on 22.05.2026, i.e., after sanction of projects to NPEAs.
- c. The Committee was informed that a portion of the recently notified areas of AMD overlaps with NMEDT blocks allocated to NPEAs for regional subsurface screening.



- d. The Committee discussed the matter and observed that the area had been allocated to the NPEAs prior to its notification to AMD.
- e. The Committee further observed that the NMEDT-funded projects are limited to regional subsurface studies, and in the event that analytical values exceed the threshold prescribed under the AMCR, the concerned area shall be surrendered to AMD.
- f. The Committee further observed that the data generated through the regional subsurface screening carried out under NMEDT-funded projects would also be useful in supporting AMD's exploration activities.
- g. **The Committee decided that, while delineating G3 prospecting blocks from the regional survey, the areas notified to AMD shall be excluded. However, as the regional subsurface screening project has already commenced, the ongoing work may continue.**



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Annexure -2

**List of participants attended 9th Joint Meeting of Technical-cum-cost Committees
(TCC-I & TCC-II) of NMEDT held on 25th June, 2026 through VC mode**

S.no	Name	Designation	Email ID	Contact No	Organization
1.	Dr. S. Ravi	Dy. Director General, GSITI, Hyderabad	s.ravi1@gsi.gov.in	9441138834	Chairman, TCC-I
2.	Shri. Pradeep Singh	Addl. Director General, GSI, Kolkata	pradeep.singh@gsi.gov.in	9810233957	Chairman, TCC -II
3.	Shri. I.R. Kirmani	ADG (Retd.), GSI	irkirmani@yahoo.com	9414014723	Member TCC-I
4.	Shri. M. Mohan	Dy. Director General (Retd.), GSI	mariappan.mohan@gmail.com	9423686547	Member TCC-1
5.	Shri. K. Koteswara Rao	Dy.D.G. (Retd.) GSI	kkrao1957@gmail.com	9000117969	Member TCC-1
6.	Dr. S. K. Kulshrestha	DDG-RMH-III, NER, GSI, Shillong	s.kulshrestha@gsi.gov.in	9413330658	Member TCC-1
7.	Dr. E.V.S.S.K. Babu	Scientist (G), NGRI	evsskbabu@ngri.res.in	9441535852	Member TCC-1
8.	Shri. S.K. Adhikari	Chief Mining Geologist, IBM, Nagpur	skadhikari@ibm.gov.in	7588690545	Member TCC-1
9.	Shri. S Dhanendran	Director, GSI & Member Secretary, TCC-I, NMEDT, GSI TI Hyderabad	s.dhanendran@gsi.gov.in	9944882204	Member Secretary TCC-1
10.	Shri. Sanjay Singh	Director, GSI, Western Region, Jaipur	sanjay.singh3@gsi.gov.i n	9928860884	Member Secretary TCC-II
11.	Shri. Sunil Kumar Vashisth	GM (Retired), Hindustan Zinc Limited, Udaipur	sunilhzi@gmail.com	9829059236	Member TCC-II
12.	Shri. D.S.Jeere	Director, GSI, RSAS Bengaluru.	dattatreya.jeere@gsi.gov.i n	-	Member TCC-II
13.	Shri M.K.Patel	Dy. Director General (Retired), GSI	patelmk27@gmail.com	9040011231	Member TCC-II
14.	Dr. T.S.Sunil Kumar	Addl. Director (Retired), AMD	ts.sunilkumar@gmail.co m	9502560153	Member TCC-II
15.	Shri. Anoop Kumar	CAO, GSI, CHQ Kolkata, GSI	anoop.kumar2@gsi.gov.in	-	Member TCC-II
16.	Representatives of M/s. Geo Marine Solutions Pvt Ltd.				
17.	Representatives of M/s. MMPL Pvt. Ltd.				
18.	Representatives of M/s. Critical Mineral Trackers				
19.	Representatives of M/s. Hindmetal Exploration Services Pvt. Ltd.				
20.	Representatives of M/s. Mining Tech Consultancy Services Pvt. Ltd.				

21.	Representatives of M/s. United Exploration India Pvt. Ltd.
22.	Representatives of M/s. GeoExpore Pvt. Ltd.
23.	Representatives of MECL
24.	Representatives of FCI Aravali Gypsum and Minerals India Ltd.
25.	Representatives of M/s. NRD-TATA Steel Ltd.
26.	Representatives of M/s. Gemcokati Exploration Pvt. Ltd.
27.	Representatives of M/s. Ocean Drilling Pvt. Ltd.


24/07/2016

