

**Ministry of Mines**  
**National Mineral Exploration and Development Trust**  
**Minutes of 8th Joint Meeting of Technical-cum-Cost Committees held on**  
**17<sup>th</sup>, 22<sup>nd</sup> and 27<sup>th</sup> April, 2026 through video conferencing mode**

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The 8<sup>th</sup> Joint meeting of Technical Cum-Cost Committees (TCC-I & TCC-II) of National Mineral Exploration and Development Trust (NMEDT) was held on 22<sup>nd</sup> April, 2026 in VC mode for technical evaluation of 3 blocks allocated in Siwana Ring Complex, Rajasthan for regional consolidation & rapid subsurface screening in areas with estimated soil thickness >10m, re-evaluation of RMT proposal of M/s. Geovale Services Pvt. Ltd., review of ongoing exploration projects in Siwana Ring Complex, review of ongoing baseline data generation projects of GSI, etc.

The meeting was chaired jointly by Dr. S. Ravi, Dy. Director General, Geological Survey of India (GSI) and Chairman, TCC-I and Shri Pradeep Singh, Dy. Director General, Geological Survey of India (GSI) and Chairman, TCC-II. The list of participants is provided in Annexure-9.

**Additional Session of 8<sup>th</sup> Joint TCC held on 17<sup>th</sup> April, 2026 for allocation of blocks in Siwana Ring Complex**

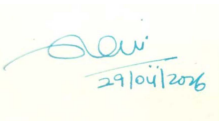
Dr. S. Ravi, Chairman, TCC-I, extended a warm welcome to all members and apprised

them of the purpose of the meeting. In his opening address, Dr. Ravi stated that Within the framework of India's Critical Minerals Mission, the Siwana Ring Complex (SRC) is uniquely strategic as a large peralkaline igneous province with demonstrated potential not only for REE, but specifically for Heavy Rare Earth Elements (HREE) and associated critical rare metals such as Nb. As exploration activities have expanded, multiple agencies have been engaged in exploration within different parts of the SRC. Geological Survey of India has submitted a comprehensive exploration plan for SRC, to be undertaken by GSI as well as through engagement of NPEAs.

Shri Pradeep Singh, Chairman, TCC-II further informed that GSI has outlined the area available for future exploration in Siwana Ring Complex. In this line GSI has identified an area of ~330 sq. km having soil cover thickness over 10m for ground/airborne geophysical survey and shallow drilling. The proposed area has been divided into three blocks, in which regional-level studies will be undertaken.

**Discussion on Regional consolidation & Rapid Subsurface Screening of Siwana Ring Complex**

The Committee was apprised that GSI has delineated 725 sq. km. of most prospective area of the SRC for REE and RM exploration. Out of 725 sq. km, Geological Survey of India G2/G3 explored area up to FS 2025–26 covers 23.97 sq. km, Mineral Exploration and Consultancy Limited G3 blocks sanctioned by NMEDT cover 11.34 sq. km, additional G3 blocks submitted by GSI for NPEA/NEA and sanctioned by NMEDT cover 30.40 sq. km, and area notified for Atomic Minerals Directorate for Exploration and Research is 75 sq. km, thereby making the total area currently under exploration ~141 sq. km and leaving 584 sq. km for future exploration planning.

  
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GSI has proposed an exploration plan for 70 sq. km during FS 2026–2030, while 12 sq. km covering Siwana town is not suitable for formulation of G3 projects. After excluding these areas, the balance area available for exploration by NEA/NPEA/State Government agencies works out to 502 sq. km, of which 82 sq. km comprises isolated hills and foothills with protected forest and estimated soil thickness of less than 10 m where G3 projects may be formulated directly, depending on potentiality; 90 sq. km consists of challenging rock terrain with protected forest where drilling execution would be difficult, and the remaining 330 sq. km having soil thickness greater than 10 m has been identified for ground/airborne geophysics and shallow drilling.

The Committee was further apprised that a significant portion of the SRC is covered by soil and sediment of approximate thickness up to 150 m, limiting direct surface geological observations. To address this challenge, a focused subsurface screening programme combining shallow drilling and ground/airborne geophysical surveys has been proposed for these covered domains for rapid assessment of covered terrains and identification of high-potential zones for REE and RM mineralisation in soil-covered areas.

The proposed activities, as envisaged by GSI, include ground gravity, magnetic, or other suitable geophysical surveys such as airborne electromagnetic/airborne magnetic gradiometric surveys to decipher overburden thickness, concealed structures, and intrusive architecture for planning deeper boreholes; drilling of shallow boreholes up to 125 m depth on a 2 km × 1 km grid for rapid assessment of depth to bedrock and subsurface architecture beneath covered terrains; constraining lithology and identification of first-order REE–RM potential; and systematic REE mineral phase assessment. NEAs/NPEAs may undertake the proposed projects of shallow drilling and geophysical surveys through NMEDT funding in technical collaboration with Geological Survey of India.

With these backgrounds, the committee deliberated the proposal and gave their observations/suggestions as follows:

1. The identified gap area comprises both outcropping and covered terrains and an area of ~330 sq. km has been prioritised for further exploration.
2. A 2 km × 1 km grid has been laid over the total area, and the selected 330 sq. km area has been earmarked for generation of continuous subsurface geochemical and geophysical proxies.
3. The Committee noted that integration of the proposed geochemical and geophysical datasets with existing exploration inputs and baseline geoscience data of the Siwana Complex is expected to aid identification of fertile litho-structural domains for systematic subsurface exploration.
4. Surface and subsurface geophysical proxies are proposed to be generated through gravity surveys with an optimum ground station interval of 100 m × 200 m, suitable to the geological disposition of the area.
5. The dense gravity data generated will be utilised for integrated interpretation, signal depth estimation, and mineral system modelling for critical minerals.
6. Subsurface geochemical proxies are proposed through exploratory scout drilling with one borehole in each 1 km × 2 km grid, targeted to a minimum depth of 50 m in basement rock.

  
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7. The drilling programme will be undertaken in phases, beginning with one borehole in 8 sq. km, followed by one borehole in 4 sq. km, and subsequently one borehole in 2 sq. km, based on results obtained.
8. The Committee noted that if any borehole intersects a fertile zone during initial drilling, a systematic G3 stage exploration block may be initiated. TCC will guide and review the finalisation of borehole locations based on interpretation of available geoscience datasets.
9. The feasibility of aerogeophysical studies, including airborne electromagnetic and airborne magnetic gradiometric surveys, was also discussed by the Committee.
10. The Committee observed that aerogeophysical surveys have already been carried out under the National Aero Geophysical Mapping Programme and the data is available on the NGDR portal.
11. It was further pointed out that although acquisition of aerogeophysical data is relatively less time-consuming compared to ground geophysical surveys, obtaining necessary permissions from the competent authority, including Directorate General of Civil Aviation, particularly in cases involving overseas flying companies, may take considerable time.
12. In view of the above, the Committee agreed that ground geophysical surveys would be more suitable for timely completion of the proposed study.

After thorough and extended deliberations on multiple aspects, members of both committees unanimously agreed to classify the participating agencies based on the following parameters:

- i. The agency that has shown willingness to take up the study.
- ii. The agency that has already been allocated blocks during previous phases of allocation of G3 blocks in Siwana Ring Complex, are not to be considered.
- iii. Since the proposed work involve large amount of drilling work, the shortlisted agencies were then scrutinised for in-house drilling capability.
- iv. The further shortlisted agencies were scrutinised for number of Geophysicists in the agency as the Geophysical Survey is one of the major component of the defined work.
- v. Next level of scrutiny involved track record of projects executed under NMEDT, including adherence to timelines and quality of execution.
- vi. Financial soundness, ensuring the agency is capable of completing the project without delays.

The Committee was further apprised that a total of 24 agencies have expressed willingness to undertake the project.

- i. Out of these, 7 agencies had previously been allocated G3 blocks in the SRC area.
- ii. From the remaining 17 agencies, 8 agencies were found to have in-house drilling teams.
- iii. Out of the balance agencies, 6 agencies were reported to have geophysicists as per Quality Council of India-National Accreditation Board for Education and Training data (QCI-NABET).

The six shortlisted agencies are:

Sl. No.	Agency
1.	Critical Mineral Trackers
2.	Deepsar Mineral Explorer
3.	Kartikay Exploration & Mining Services Pvt. Ltd.
4.	MMPL Private Limited
5.	Shijay Projects India Private Limited
6.	South West Pinnacle Exploration Limited

The agencies were further shortlisted on the basis of track record of projects executed under NMEDT, including adherence to timelines and quality of execution. MMPL Pvt. Ltd. and Critical Mineral Trackers are engaged in several NMEDT funded projects and have completed number of projects with satisfactory outcome.

Also, the committee opined that out of 3 blocks, 1 may be given to a new agency that has been notified in last 1 year, to encourage participation of new agencies. Shijay projects India Pvt. Ltd. has been shortlisted as the agency have 4 nos. of Geophysicists in their team.

In view of the above the allocation of blocks is as given below:

Sl. No.	Name of the Agency	Name of the Block	Area of Block
1.	Shijay Projects India Private Limited	RSRC-A	86 sq. km. (Approx.)
2.	MMPL Private Limited	RSRC-B	130 sq. km. (Approx.)
3.	Critical Mineral Trackers	RSRC-C	114 sq. km. (Approx.)

The minutes of additional session held on 17<sup>th</sup> April 2026 was circulated amongst selected agencies and they were suggested to submit the DPR.

### **Agenda 8.1 Technical Evaluation of New Project Proposals (22.04.2026 & 27.04.2026)**

The committee discussed the DPRs and opined that a uniform and consistent methodology shall be adopted to enable comparative assessment of results across all blocks. Based on this standardized evaluation, blocks exhibiting encouraging outcomes may be seamlessly upgraded to the next stage of exploration.

Initially, reinterpretation of existing ground and airborne geophysical database, characterization of geophysical (GP) signals in relation to rock types and host lithology to be done by overlay analysis. The agency will compile and collate all the available radiometric, NAGMP and hyperspectral data (including Hyperion and PRISMA data. The agency should attempt to prepare a regolith thickness map using aeromagnetic map. Nd anomaly map to be prepared using this readily available data.

It was also decided that the agency should share all the chemical data with NMEDT Secretariat as soon as it is generated.

Based on the above discussions and the detailed review of the DPR, a reference costsheet incorporating the standardized quantum of work was prepared and finalized for

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uniform adoption across all blocks. The costing of each project was completed as per the Revised SoC of NMEDT 2025.

**Agenda 8.1.1 Regional Study for Rapid Subsurface Screening of Siwana Ring Complex in RSRC-A Block, District-Balotra, Rajasthan.**

**[Implementing Agency: M/s Shijay Projects India Private Limited]**

**Recommendations of TCC-1:**

*The committee recommended the proposal titled “Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block A)” for approval of PSC, NMEDT with an estimated cost of Rs. 972.65 lakhs (including GST) within time schedule of 10 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 8 months.*



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**Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block A). Area: 86 sq. km**  
**Agency: Shijay Projects India Pvt. Ltd.**  
**Nos. of Boreholes-43 Nos.; Borehole depth: 125m each ; Total Drilling: 5375 m; Schedule timeline- 10 months**  
**Review after: 3rd, 6th and 8th months**

S. No.	Job Description	Unit	Rates will be as per revised NMEDT SoC		Estimated Cost of the Proposal		Remarks
			SoC-Item -SI	Rates as per SoC (2025-26)	Qty.	Total Amount (Rs)	
<b>Phase I (6 months)</b>							
<b>A</b>	<b>Geological Investigations</b>						
i	Geologist Man Days (In field)	Mandays	1.2.1a	14500	60	870000	Including upgradation of map on 1:12500 scale, core logging and sampling
ii	Geologist: at HQ	Mandays	1.2.1a	10500	30	315000	<b>Data Compilation and Interim Report preparation</b>
iii	Labour charges (for sample collection, packaging, carrying, 2 Nos)	Mandays	5.8	556	120	66720	As per Labour Commission
iv	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	51	400350	If needed, will be added later
v	Labour charges (4 Nos for sample preparation)	Mandays	5.8	556	204	113424	As per Labour Commission
i	Geophysicist: at HQ	Mandays	1.2.1a	10500	30	315000	<b>Data Compilation and Interim Report preparation</b>
	<b>Sub Total A</b>					<b>2080494</b>	
<b>B</b>	<b>Other Charges related to 1st Phase work</b>						
i	Demarcation of lease boundary, Fixation of borehole and determination of co-ordinates & Reduced Level (RL) of the boreholes by DGPS (including charges for labours deployed for the work)	Per point of Observation	1.3.2	24000	11	264000	11 BH

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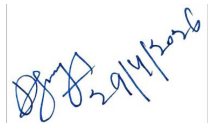
	<b>Sub Total B</b>						<b>264000</b>	
<b>C</b>	<b>Drilling (1st Phase)</b>							
<b>i</b>	Drilling (Hard rock) (HQ size)	per m	2.2.1.1d	10000	1375	13750000		
<b>ii</b>	Land Compensation	Per Borehole	5.6	30000	11	330000	As per actuals as certified by local authorities subject to a maximum of 30,000 per bore hole	
<b>iii</b>	Concrete Pillar Construction	Per Borehole	2.2.7	2000	11	22000		
	Drill core Preservation		5.3	1590	400	636000		
<b>iv</b>	Borehole Plugging by cement	Lumpsum per borehole	2.2.8	10000	11	110000		
	<b>Sub Total C</b>						<b>14848000</b>	
<b>D</b>	<b>Laboratory Studies</b>							
<b>i</b>	ICP MS (REE & Trace)	Per sample	4.1.15	7400	350	2590000		
<b>ii</b>	ICP MS (REE & Trace) 10% check samples	Per sample	4.1.15	7400	35	259000		
<b>iii</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Per sample	4.1.17a	4200	20	84000		
<b>iv</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements) 10% check samples	Per sample	4.1.17a	4200	2	8400		
<b>v</b>	XRD analysis for identification of minerals (Random)	Per sample	4.5.2	4000	10	40000		
	<b>Physical &amp; Petrological Studies</b>							
<b>vi</b>	Preparation of polished thin section of rock	Per sample	4.3.2	800	10	8000		
<b>vii</b>	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	10	28000		
	<b>Sub Total D</b>						<b>3017400</b>	
	<b>Total A+B+C+D</b>						<b>20209894</b>	

  
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<b>E</b>	<b>GP Investigation</b>						
i	Gravity Survey	Per station	3.1a	3800	1075	4085000	200 m station interval, 400 m traverse spacing for each 2 sq. km. grid gives 25 points in 1 grid. Total points 25*43
	<b>Sub Total E</b>					<b>4085000</b>	
	<b>Total Phase I</b>					<b>24294894</b>	
	Geological Report Preparation (Interim)					<b>0</b>	They will be presenting to TCC
	<b>1st Phase Total</b>					<b>24294894</b>	
<b>Phase 2 (only after review of 1st phase of work)</b>							
<b>H</b>	<b>Geological Work (Mainly Core Logging)</b>						
i	Geologist: In field (For Core Logging)	Mandays	1.2.1a	14500	90	1305000	
ii	Labour charges (for sample collection, packaging, carrying, 2 Nos)	Mandays	5.8	556	180	100080	As per Labour Commission
ii	Geologist: at HQ	Mandays	1.2.1a	10500	0	0	
iii	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	140	1099000	
iv	Labour charges (4 Nos for sample preparation)	Mandays	5.8	556	560	311360	
	<b>Sub Total H</b>					<b>2815440</b>	
<b>I</b>	<b>Drilling (II nd Phase)</b>						
i	Drilling (Hard rock) (HQ size)	per m	2.2.1.1d	10000	4000	40000000	
ii	Land Compensation	Per Borehole	5.6	30000	32	960000	
iii	Concrete Pillar Construction	Per Borehole	2.2.7	2000	32	64000	
iv	Borehole Plugging	Lumpsum per borehole	2.2.8	10000	32	320000	
v	Drill Core Preservation	per m	5.3	1590	1500	2385000	
<b>F</b>	<b>Laboratory Studies</b>						
i	ICP MS (REE & Trace)	Per sample	4.1.15	7400	1000	7400000	

  
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ii	ICP MS (REE & Trace) 10% check samples	Per sample	4.1.15	7400	100	740000	
iii	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Per sample	4.1.17a	4200	20	84000	
iv	Major oxides (WD XRF)- (oxides+ traces -24 elements) 10% check samples	Per sample	4.1.17a	4200	2	8400	
v	XRD analysis for identification of minerals (Random)	Per sample	4.5.2	4000	10	40000	
<b>Physical &amp; Petrological Studies</b>							
vi	Preparation of polished thin section of rock	Per sample	4.3.2	800	10	8000	
vii	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	10	28000	
viii	EPMA	Per hour	4.4.1	10500	0	0	
<b>Sub Total I</b>						<b>52037400</b>	
<b>Phase II Total</b>						<b>54852840</b>	
<b>Total Drilling Cost (Phase I + Phase II)</b>						<b>53750000</b>	
<b>Total Phase I + Phase II</b>						<b>79147734</b>	
<b>J</b>	<b>Miscellaneous Charges related to Drilling (Phase I + Phase II)</b>						
i	Drill Rig Transportation - To & Fro	lumpsum	2.2.9 (4)	For Drilling cost more than 2 Crore : 10% of the Drilling Cost with a maximum ceiling of ₹ 25 lakh.		2500000	Miscellaneous Charges (Transportation of Drilling Rig, Accommodation for Drill Camp, Camp setting and winding, construction of Approach road)
ii	Drilling Camp Setting Cost						
iii	Drilling Camp Winding Cost						
iv	Monthly Accomodation Charges						
v	Approach Road to Drill site						
<b>Sub Total J</b>						<b>2500000</b>	
<b>Total outsourced component (if any)</b>						<b>0</b>	

  
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	<b>Total Cost</b>					<b>81647734</b>	
<b>L</b>	Geological Report Preparation		5.2 (iii)	Total cost of the project exceeding ₹150 lakh		<b>750000</b>	As per SoC
<b>M</b>	Peer Review by External Expert		As per EC decision	30000		<b>30000</b>	
<b>N</b>	<b>Project Cost without GST</b>					<b>82427734</b>	
<b>O</b>	<b>GST - 18%</b>					<b>14836992</b>	
<b>P</b>	<b>Total Project Cost(With GST)</b>					<b>97264726</b>	
	<b>Rs. In Lacs</b>					<b>972.65</b>	
<b>Note:</b>							
<b>1</b>	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>						
<b>2</b>	<b>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.</b>						
<b>3</b>	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>						
<b>4</b>	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>						
<b>5</b>	<b>Any item of work not mentioned above shall be added as per SoC.</b>						
<b>6</b>	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>						

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## Time Schedule/ Action Plan for Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block A).

Area: 86 sq. km

Sl. No.	Nature of work	Months									
		1	2	3	4	5	6	7	8	9	10
<b>Phase 1</b>											
1	Mobilization & Camp Setting										
2	Collation of geological, geophysical, and remote sensing data with Ground Check Collation of geological, geophysical										
3	Topographical Survey										
4	Ground Gravity										
5	Surveying for Geophysical Survey										
6	Reconnaissance drilling (1 borehole per 8 sq. km)										
7	Core Sampling										
8	Chemical Analytical Work for Drill Core Samples										
<b>Phase 2</b>											
11	Drilling - Increased density										
12	Sample Preparation (Drill Core) for Phase 2										
13	Chemical Analytical Work for Drill Core Samples										
14	Drilling - Detailed phase (1 borehole per 2 sq. km)										
15	Sample Preparation (Drill Core) for Phase 3										
16	Chemical Analytical Work for Drill Core Samples										
17	Camp Winding										
18	Geological Report										

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**Agenda 8.1.2 Regional Study for Rapid Subsurface Screening of Siwana Ring Complex in RSRC-B Block, District-Balotra, Rajasthan.**

**[Implementing Agency: M/s MMPL Pvt. Ltd.]**

**Recommendations of TCC-1:**

***The committee recommended the proposal titled “Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block B)” for approval of PSC, NMEDT with an estimated cost of Rs. 1421.38 lakhs (including GST) within time schedule of 10 months for carrying out the proposed work and submission of report as per Annexure – 2A & 2B. The item will be reviewed after 3, 6 and 8 months.***



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**Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block B), Area: 130 sq. km**  
**Agency: MMPL Pvt. Ltd.**  
**Nos. of Boreholes-65 Nos.; Borehole depth: 125m each ; Total Drilling: 8125 m; Schedule timeline- 10 months**  
**Review after: 3rd, 6th and 8th months**

S. No.	Job Description	Unit	Rates will be as per revised NMEDT SoC		Estimated Cost of the Proposal		Remarks
			SoC-Item -SI	Rates as per SoC (2025-26)	Qty.	Total Amount (Rs)	
<b>Phase I (6 months)</b>							
<b>A</b>	<b>Geological Investigations</b>						
i	Geologist Man Days (In field)	Mandays	1.2.1a	14500	90	1305000	including upgradation of map on 1:12500 scale, core logging and sampling
ii	Geologist: at HQ	Mandays	1.2.1a	10500	30	315000	<b>Data Compilation and Interim Report preparation</b>
iii	Labour charges (for sample collection, packaging, carrying, 2 Nos)	Mandays	5.8	556	180	100080	As per Labour Commission
iv	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	76	596600	If needed, will be added later
v	Labour charges (4 Nos for sample preparation)	Mandays	5.8	556	304	169024	As per Labour Commission
i	Geophysicist: at HQ	Mandays	1.2.1a	10500	30	315000	<b>Data Compilation and Interim Report preparation</b>
	<b>Sub Total A</b>					<b>2800704</b>	
<b>C</b>	<b>Pitting/Trenching</b>						
i	Trenching	per cu m	2.1.1	4125	0	0	
	BRS samples				40		Channel samples to be collected
	<b>Sub Total C</b>					<b>0</b>	
<b>D</b>	<b>Other Charges related to 1st Phase work</b>						
viii	Demarcation of lease boundary, Fixation of borehole and determination of co-	Per point of Observation	1.3.2	24000	16	384000	16 BH

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	ordinates & Reduced Level (RL) of the boreholes by DGPS (including charges for labours deployed for the work)						
<b>Sub Total D</b>						<b>384000</b>	
<b>E</b>	<b>Drilling (1st Phase)</b>						
<b>i</b>	Drilling (Hard rock) (HQ size)	per m	2.2.1.1d	10000	2000	20000000	
<b>ii</b>	Land Compensation	Per Borehole	5.6	30000	16	480000	As per actuals as certified by local authorities subject to a maximum of 30,000 per bore hole
<b>iii</b>	Concrete Pillar Construction	Per Borehole	2.2.7	2000	16	32000	
	Drill core Preservation		5.3	1590	550	874500	
<b>iv</b>	Borehole Plugging by cement	Lumpsum per borehole	2.2.8	10000	16	160000	
<b>Sub Total E</b>						<b>21546500</b>	
<b>F</b>	<b>Laboratory Studies</b>						
<b>i</b>	ICP MS (REE & Trace)	Per sample	4.1.15	7400	520	3848000	Core samples+ 40 BRS
<b>ii</b>	ICP MS (REE & Trace) 10% check samples	Per sample	4.1.15	7400	52	384800	
<b>iii</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Per sample	4.1.17a	4200	30	126000	
<b>iv</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements) 10% check samples	Per sample	4.1.17a	4200	3	12600	
<b>v</b>	XRD analysis for identification of minerals (Random)	Per sample	4.5.2	4000	10	40000	
	<b>Physical &amp; Petrological Studies</b>						
<b>vi</b>	Preparation of polished thin section of rock	Per sample	4.3.2	800	10	8000	
<b>vii</b>	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	10	28000	
<b>viii</b>	EPMA	Per hour	4.4.1	10500	0	0	

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	<b>Sub Total F</b>					<b>4447400</b>	
	<b>Total A+B+C+D+E+F</b>					<b>29178604</b>	
<b>G</b>	<b>GP Investigation</b>						
<b>i</b>	Gravity Survey	Per station	3.1a	3800	1625	6175000	200 m station interval, 400 m traverse spacing for each 2 sq. km. grid gives 25 points in 1 grid. Total points 25*65
	<b>Sub Total G</b>					<b>6175000</b>	
	<b>Total Phase I</b>					<b>35353604</b>	
	Geological Report Preparation (Interim)					<b>0</b>	They will be presenting to TCC
						<b>1st Phase Total</b>	<b>35353604</b>
	<b>Phase 2 (only after review of 1st phase of work)</b>						
<b>H</b>	<b>Geological Work (Mainly Core Logging)</b>						
<b>i</b>	Geologist: In field (For Core Logging)	Mandays	1.2.1a	14500	120	1740000	
<b>ii</b>	Labour charges (for sample collection, packaging, carrying, 2 Nos)	Mandays	5.8	556	240	133440	As per Labour Commission
<b>ii</b>	Geologist: at HQ	Mandays	1.2.1a	10500	0	0	
<b>iii</b>	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	206	1617100	
<b>iv</b>	Labour charges (4 Nos for sample preparation)	Mandays	5.8	556	824	458144	
	<b>Sub Total H</b>					<b>3948684</b>	
<b>I</b>	<b>Drilling (II nd Phase)</b>						
<b>i</b>	Drilling (Hard rock) (HQ size)	per m	2.2.1.1d	10000	6125	61250000	
<b>ii</b>	Land Compensation	Per Borehole	5.6	30000	49	1470000	
<b>iii</b>	Concrete Pillar Construction	Per Borehole	2.2.7	2000	49	98000	
<b>iv</b>	Borehole Plugging	Lumpsum per borehole	2.2.8	10000	49	490000	
<b>v</b>	Drill Core Preservation	per m	5.3	1590	1500	2385000	

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<b>F</b>	<b>Laboratory Studies</b>						
<b>i</b>	ICP MS (REE & Trace)	Per sample	4.1.15	7400	1470	10878000	
<b>ii</b>	ICP MS (REE & Trace) 10% check samples	Per sample	4.1.15	7400	147	1087800	
<b>iii</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Per sample	4.1.17a	4200	30	126000	
<b>iv</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements) 10% check samples	Per sample	4.1.17a	4200	3	12600	
<b>v</b>	XRD analysis for identification of minerals (Random)	Per sample	4.5.2	4000	10	40000	
	<b>Physical &amp; Petrological Studies</b>						
<b>vi</b>	Preparation of polished thin section of rock	Per sample	4.3.2	800	10	8000	
<b>vii</b>	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	10	28000	
<b>viii</b>	EPMA	Per hour	4.4.1	10500	0	0	
	<b>Sub Total I</b>					<b>77873400</b>	
	<b>Phase 2 Total</b>					<b>81822084</b>	
	<b>Total Drilling Cost (Phase I + Phase II)</b>					<b>81250000</b>	
	<b>Total Phase I + Phase II</b>					<b>117175688</b>	
<b>J</b>	<b>Miscellaneous Charges related to Drilling (Phase I + Phase II)</b>						
<b>i</b>	Drill Rig Transportation - To & Fro	lumpsum	2.2.9 (4)	For Drilling cost more than 2 Crore : 10% of the Drilling Cost with a maximum ceiling of ₹ 25 lakh.	2500000		Miscellaneous Charges (Transportation of Drilling Rig, Accommodation for Drill Camp, Camp setting and winding, construction of Approach road)
<b>ii</b>	Drilling Camp Setting Cost						
<b>iii</b>	Drilling Camp Winding Cost						
<b>iv</b>	Monthly Accomodation Charges						
<b>v</b>	Approach Road to Drill site						
	<b>Sub Total J</b>					<b>2500000</b>	

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	<b>Total outsourced component (if any)</b>					<b>0</b>	
	<b>Total Cost</b>					<b>119675688</b>	
<b>L</b>	Geological Report Preparation		5.2 (iii)	Total cost of the project exceeding ₹150 lakh		<b>750000</b>	As per SoC
<b>M</b>	Peer Review by External Expert		As per EC decision	30000		<b>30000</b>	
<b>N</b>	<b>Project Cost without GST</b>					<b>120455688</b>	
<b>O</b>	<b>GST - 18%</b>					<b>21682024</b>	
<b>P</b>	<b>Total Project Cost(With GST)</b>					<b>142137712</b>	
	<b>Rs. In Lacs</b>					<b>1421.38</b>	
<b>Note:</b>							
<b>1</b>	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>						
<b>2</b>	<b>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.</b>						
<b>3</b>	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>						
<b>4</b>	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>						
<b>5</b>	<b>Any item of work not mentioned above shall be added as per SoC.</b>						
<b>6</b>	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>						

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**Time Schedule/ Action Plan for Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan  
(Block B), Area: 130 sq. km**

S. no.	Activity	Unit	Months														
			1	2	3	Review	4	5	6	Review	7	8	Review	9	10		
1	Geologist Days HQ	Days	■				Review					Review				Review	
2	Geologist Party Days Field	Days	■	■	■												
3	Geophysical field party days	Days	■	■	■												
4	Sampling (Pitting & Trenching)	Days						■	■	■							
5	Laboratory Studies	Days						■	■	■							
6	Core Drilling	Days						■	■	■							
7	Survey Party Days	Days						■	■	■							
8	Post Field Interpretation	Days									■		■				
9	Report Compilation, review & Submission	Days													■		■


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**Agenda 8.1.2 Regional Study for Rapid Subsurface Screening of Siwana Ring Complex in RSRC-C Block, District-Balotra, Rajasthan.**  
**[Implementing Agency: M/s. Critical Mineral Trackers]**

**Recommendations of TCC-1:**

*The committee recommended the proposal titled “Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block C)” for approval of PSC, NMEDT with an estimated cost of Rs. 1252.62 lakhs (including GST) within time schedule of 10 months for carrying out the proposed work and submission of report as per Annexure – 3A & 3B. The item will be reviewed after 3, 6 and 8 months.*



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**Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan (Block C), Area: 114 sq. km**  
**Agency: Critical Mineral Trackers**  
**Nos. of Boreholes-57 Nos.; Borehole depth: 125m each ; Total Drilling: 7125 m; Schedule timeline- 10 months**  
**Review after: 3rd, 6th and 8th months**

S. No.	Job Description	Unit	Rates will be as per revised NMEDT SoC		Estimated Cost of the Proposal		Remarks
			SoC-Item -SI	Rates as per SoC (2025-26)	Qty.	Total Amount (Rs)	
<b>Phase I (6 months)</b>							
<b>A</b>	<b>Geological Investigations</b>						
i	Geologist Man Days (In field)	Mandays	1.2.1a	14500	80	1160000	including upgradation of map on 1:12500 scale, core logging and sampling
ii	Geologist: at HQ	Mandays	1.2.1a	10500	30	315000	<b>Data Compilation and Interim Report preparation</b>
iii	Labour charges (for sample collection, packaging, carrying, 2 Nos)	Mandays	5.8	556	160	88960	As per Labour Commission
iv	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	65	510250	If needed, will be added later
v	Labour charges (4 Nos for sample preparation)	Mandays	5.8	556	260	144560	As per Labour Commission
i	Geophysicist: at HQ	Mandays	1.2.1a	10500	30	315000	<b>Data Compilation and Interim Report preparation</b>
	<b>Sub Total A</b>					<b>2533770</b>	
<b>C</b>	<b>Pitting/Trenching</b>						
i	Trenching	per cu m	2.1.1	4125	0	0	
	BRS samples				30		Channel samples to be collected
	<b>Sub Total C</b>					<b>0</b>	
<b>D</b>	<b>Other Charges related to 1st Phase work</b>						
viii	Demarcation of lease boundary, Fixation of borehole and determination of co-	Per point of Observation	1.3.2	24000	14	336000	14 BH

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	ordinates & Reduced Level (RL) of the boreholes by DGPS (including charges for labours deployed for the work)						
<b>Sub Total D</b>						<b>336000</b>	
<b>E</b>	<b>Drilling (1st Phase)</b>						
<b>i</b>	Drilling (Hard rock) (HQ size)	per m	2.2.1.1d	10000	1750	17500000	
<b>ii</b>	Land Compensation	Per Borehole	5.6	30000	14	420000	As per actuals as certified by local authorities subject to a maximum of 30,000 per bore hole
<b>iii</b>	Concrete Pillar Construction	Per Borehole	2.2.7	2000	14	28000	
	Drill core Preservation		5.3	1590	450	715500	
<b>iv</b>	Borehole Plugging by cement	Lumpsum per borehole	2.2.8	10000	14	140000	
<b>Sub Total E</b>						<b>18803500</b>	
<b>F</b>	<b>Laboratory Studies</b>						
<b>i</b>	ICP MS (REE & Trace)	Per sample	4.1.15	7400	450	3330000	420 Core samples+ 30 BRS
<b>ii</b>	ICP MS (REE & Trace) 10% check samples	Per sample	4.1.15	7400	45	333000	
<b>iii</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Per sample	4.1.17a	4200	25	105000	
<b>iv</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements) 10% check samples	Per sample	4.1.17a	4200	2	8400	
<b>v</b>	XRD analysis for identification of minerals (Random)	Per sample	4.5.2	4000	10	40000	
	<b>Physical &amp; Petrological Studies</b>						
<b>vi</b>	Preparation of polished thin section of rock	Per sample	4.3.2	800	10	8000	
<b>vii</b>	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	10	28000	
<b>viii</b>	EPMA	Per hour	4.4.1	10500	0	0	

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	<b>Sub Total F</b>					<b>3852400</b>	
	<b>Total A+B+C+D+E+F</b>					<b>25525670</b>	
<b>G</b>	<b>GP Investigation</b>						
<b>i</b>	Gravity Survey	Per station	3.1a	3800	1425	5415000	200 m station interval, 400 m traverse spacing for each 2 sq. km. grid gives 25 points in 1 grid. Total points 25*57
	<b>Sub Total G</b>					<b>5415000</b>	
	<b>Total Phase I</b>					<b>30940670</b>	
	Geological Report Preparation (Interim)					<b>0</b>	They will be presenting to TCC
						<b>1st Phase Total</b>	<b>30940670</b>
	<b>Phase 2 (only after review of 1st phase of work)</b>						
<b>H</b>	<b>Geological Work (Mainly Core Logging)</b>						
<b>i</b>	Geologist: In field (For Core Logging)	Mandays	1.2.1a	14500	110	1595000	
<b>ii</b>	Labour charges (for sample collection, packaging, carrying, 2 Nos)	Mandays	5.8	556	220	122320	As per Labour Commission
<b>ii</b>	Geologist: at HQ	Mandays	1.2.1a	10500	0	0	
<b>iii</b>	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	181	1420850	
<b>iv</b>	Labour charges (4 Nos for sample preparation)	Mandays	5.8	556	724	402544	
	<b>Sub Total H</b>					<b>3540714</b>	
<b>I</b>	<b>Drilling (II nd Phase)</b>						
<b>i</b>	Drilling (Hard rock) (HQ size)	per m	2.2.1.1d	10000	5375	53750000	
<b>ii</b>	Land Compensation	Per Borehole	5.6	30000	43	1290000	
<b>iii</b>	Concrete Pillar Construction	Per Borehole	2.2.7	2000	43	86000	
<b>iv</b>	Borehole Plugging	Lumpsum per borehole	2.2.8	10000	43	430000	
<b>v</b>	Drill Core Preservation	per m	5.3	1590	1350	2146500	
<b>F</b>	<b>Laboratory Studies</b>						

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<b>i</b>	ICP MS (REE & Trace)	Per sample	4.1.15	7400	1290	9546000	
<b>ii</b>	ICP MS (REE & Trace) 10% check samples	Per sample	4.1.15	7400	129	954600	
<b>iii</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Per sample	4.1.17a	4200	25	105000	
<b>iv</b>	Major oxides (WD XRF)- (oxides+ traces -24 elements) 10% check samples	Per sample	4.1.17a	4200	2	8400	
<b>v</b>	XRD analysis for identification of minerals (Random)	Per sample	4.5.2	4000	10	40000	
<b>Physical &amp; Petrological Studies</b>							
<b>vi</b>	Preparation of polished thin section of rock	Per sample	4.3.2	800	10	8000	
<b>vii</b>	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	10	28000	
<b>viii</b>	EPMA	Per hour	4.4.1	10500	0	0	
<b>Sub Total I</b>						<b>68392500</b>	
<b>Phase 2 Total</b>						<b>71933214</b>	
<b>Total Drilling Cost (Phase I + Phase II)</b>						<b>71250000</b>	
<b>Total Phase I + Phase II</b>						<b>102873884</b>	
<b>J</b>	<b>Miscellaneous Charges related to Drilling (Phase I + Phase II)</b>						
<b>i</b>	Drill Rig Transportation - To & Fro	lumpsum	2.2.9 (4)	For Drilling cost more than 2 Crore : 10% of the Drilling Cost with a maximum ceiling of ₹ 25 lakh.	2500000	Miscellaneous Charges (Transportation of Drilling Rig, Accommodation for Drill Camp, Camp setting and winding, construction of Approach road)	
<b>ii</b>	Drilling Camp Setting Cost						
<b>iii</b>	Drilling Camp Winding Cost						
<b>iv</b>	Monthly Accomodation Charges						
<b>v</b>	Approach Road to Drill site						
<b>Sub Total J</b>						<b>2500000</b>	
<b>Total outsourced component (if any)</b>						<b>0</b>	

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	<b>Total Cost</b>					<b>105373884</b>	
<b>L</b>	Geological Report Preparation		5.2 (iii)	Total cost of the project exceeding ₹150 lakh		<b>750000</b>	As per SoC
<b>M</b>	Peer Review by External Expert		As per EC decision	30000		<b>30000</b>	
<b>N</b>	<b>Project Cost without GST</b>					<b>106153884</b>	
<b>O</b>	<b>GST - 18%</b>					<b>19107699</b>	
<b>P</b>	<b>Total Project Cost(With GST)</b>					<b>125261583</b>	
	<b>Rs. In Lacs</b>					<b>1252.62</b>	
<b>Note:</b>							
<b>1</b>	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>						
<b>2</b>	<b>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.</b>						
<b>3</b>	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>						
<b>4</b>	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>						
<b>5</b>	<b>Any item of work not mentioned above shall be added as per SoC.</b>						
<b>6</b>	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>						

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**Time Schedule/ Action Plan for Geological and Geophysical Investigation in part of Siwana Ring Complex, Balotra district, Rajasthan  
(Block C),**

S. no.	Activity	Unit	Months															
			1	2	3	Review	4	5	6	Review	7	8	Review	9	10			
1	Geologist Days HQ	Days	■				Review					Review				Review		
2	Geologist Party Days Field	Days	■	■	■													
3	Geophysical field party days	Days	■	■	■													
4	Sampling (Pitting & Trenching)	Days						■	■	■								
5	Laboratory Studies	Days						■	■	■								
6	Core Drilling	Days						■	■	■								
7	Survey Party Days	Days						■	■	■								
8	Post Field Interpretation	Days											■	■				
9	Report Compilation, review & Submission	Days															■	■

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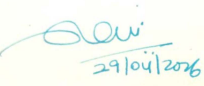
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## 8.2 Technical Re-Evaluation of RMT (Regional Mineral Targeting) Project Proposal

### Agenda 8.2.1 Regional Mineral Targeting (RMT) in parts of Lalitpur and Jhansi districts of Uttar Pradesh and Shivpuri and Tikamgarh districts of Madhya Pradesh

#### [Implementing Agency: M/s Geovale Services Pvt. Ltd.]

- a. The proposed block was recommended by Joint TCC in its 6<sup>th</sup> meeting. However, the project was deferred in 6<sup>th</sup> PSC meeting wherein Technical Experts have enquired about expected RoI.
- b. During PSC, Technical experts have also pointed that most copper mineralization in the Bundelkhand craton is disseminated in nature.
- c. The Chairman, PSC also have inquired about the scope of work proposed for the AI-ML studies and after thorough discussion, it was decided that AI-ML component of work may be dropped.
- d. In view of the comments of PSC, the project was deferred and TCC was instructed to revisit the proposal.
- e. The proposed block forms a part of Bundelkhand Craton, which has a very long evolutionary history and the available geochemical data is suggestive of arc affinity granites dominating the area.
- f. The agency informed the committee that the broad objective of present proposal is to assess the possibility of mineralization related to thickened crust in the north and east (like Li, Sn and REE).
- g. Regarding the comments of PSC, the agency apprised the committee that the area has high mineral potential and the recently concluded G4 project in the adjacent area by them has discovered unambiguous presence of a high-K alkali porphyry system (Cu-Au-Mo) using innovative alteration mineralogy based Mineral System Analyses.
- h. Assessment of mineralization potential of reported syenite and lamrophyre magma system and Granite-pegmatite-syenite hosted rare metals (W, Sn, Li, REE) and possible kimberlites would be done.
- i. The agency also informed that as the porphyry mineralization and the rare metal mineralization are generally restricted to one or two distinct magmatic activity within a tectonic regime, identifying those magmatic phases and mapping them out would be the prime task.
- j. Regarding the potentiality of the area, the agency further informed the committee that out of 200 reconnoitary samples bedrock samples analyzed in the G4 project in the nearby area, 19 samples yielded >1000 ppm Cu, 13 samples yielded >2000 ppm Cu, 2 samples yielded >5000 ppm Cu. Even in one exploratory drill a ~6m zone of >0.3% Cu with a 1m zone having ~3.1% Cu is indicated.
- k. The committee deliberated on the various aspects of the project as also discussed earlier.
- l. The committee opined that, the project shall be reviewed after all the components of first phase have been completed with all the data set. Subsequently, the next phase would be decided.

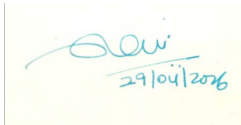
  
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- m. The committee also decided that initially only 1st phase of work would be recommended for approval of PSC. Based on outcomes of 1st phase, subsequent phases would be considered.
- n. AI-ML component of the project was also dropped.

**Recommendations of Joint TCC:**

***The committee recommended the 1<sup>st</sup> phase of proposal titled “Regional Mineral Targeting in Parts of Lalitpur and Jhansi Districts of Uttar Pradesh and Shivpuri and Tikamgarh Districts of Madhya Pradesh” for approval of PSC, NMEDT with an estimated cost of ₹20.44 lakhs (including GST) within time schedule of 4 months for carrying out the proposed work (1<sup>st</sup> phase of work). The project will be reviewed after completion of 1<sup>st</sup> phase, i.e., after 4 months.***



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**Regional Mineral Targeting in Parts of Lalitpur and Jhansi Districts of Uttar Pradesh and Shivpuri and Tikamgarh Districts of Madhya Pradesh**  
**Name of the Exploration Agency - Geovale Services Pvt. Ltd.**

**Total Area - 1000 sq. km; Core drilling: Total 2000m; 10 BH (Tentative); Completion Time -24 Months, Review: 6 months, 12 months & 18 months (For complete project)**

**For 1<sup>st</sup> phase: Completion time is 4 months. Review to be done after completion of 1<sup>st</sup> phase (4 months)**

S.N	Item of work	Unit	Rates as per NMET SoC	Rates as per SOC	Quantum	Total Amount (Rs)	Remarks
			SoC-Item -SI No.				
<b>A</b>	<b>Geological Work</b>						
<b>1</b>	<b>HQ Activities</b>						
a	Data integration and interpretation ( Head Quarter work)	1 geologist/ day	1.2.1a (a)	10,500.00	120	1,260,000.00	
c	Cost of interpretation in terms of Geophysicist mandays (HQ)	day	3.18	10,500.00	45	472,500.00	Re-gridding of 1000 sq. km area GP data like magnetic, aeromagnetic (?), gravity and other available existing GP data. New derivative maps to be prepared
	<b>Sub-Total 1</b>					1,732,500.00	
	<b>Total Phase I</b>					<b>1,732,500.00</b>	
	<b>Sub</b>						
9	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	Lumpsum	5.1	2% of the cost subject to a maximum of 5 lakhs	1	-	This amount will be reimbursed after submission of the Hard Copies and the soft copy of the final proposal along with Maps and Plan as suggested by the TCCNMET in its meeting while clearing the proposal.

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10	Final report preparation		5.2 (iii)	Total cost of the project exceeding ₹150 lakh ₹7.5 lakh	1	-	Final report submission, peer review and project conclusion would be done after all the four phases of work
11	Report Peer Review	Lump sum	As per EC	30,000.00	1	-	
<b>Project Cost without GST</b>				<b>Project Cost without GST</b>		<b>1,732,500.00</b>	
<b>18% GST</b>				<b>18% GST</b>		<b>311,850.00</b>	GST will be reimbursed as per actual and as per the applicable notified rate
				<b>Total Project Cost</b>		<b>2,044,350.00</b>	
<b>Note</b>							
1	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>						
2	<b>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.</b>						
3	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>						
4	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>						
5	<b>Any item of work not mentioned above shall be added as per SoC.</b>						
6	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>						

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Time Schedule/ Action Plan for 1 <sup>st</sup> phase of Regional Mineral Targeting in Parts of Lalitpur and Jhansi Districts of Uttar Pradesh and Shivpuri and Tikamgarh Districts of Madhya Pradesh								
S. No.			1	2	3	4	Review	Further phases of work to be decided after the outcome of 1 <sup>st</sup> phase
1	Data integration and interpretation (Head Quarter work)	Months/ Days						


  
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### 8.3 Review of Ongoing Exploration Projects

#### **Agenda 8.3.1 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**

##### **(M/s Hindmetal Exploration Services Pvt. Ltd.)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The agency apprised the committee geological mapping, desktop studies and collection of BRS samples have been completed, topographic survey and contouring by Drone is yet to start.
- c. The agency presented the TMI and RTP maps and informed three distinct magnetic anomalies are observed adjacent to the block boundary.
- d. Analytical signal showed two high magnetic domains and one low magnetic domain and Tilt derivative maps of the block showed precise location and trend of magnetic sources.
- e. The committee observed that the agency has collected grab samples, however, it was specified during Joint TCC to collect channel samples.
- f. The committee opined that the progress of work is not satisfactory and the agency should expedite the work.

##### ***Recommendations of Joint TCC:***

***The committee reviewed the progress of work and suggested the agency to expedite the work and initiate the drone survey. The project would be reviewed after 2 months.***

#### **Agenda 8.3.2 Preliminary Exploration (G3) for REE and associated critical minerals in the NB 2 block (2.00 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan**

##### **(M/s Mining Tech Consultancy Services Ltd.)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The agency apprised the committee, ASTER satellite images were used as pre-field data to distinguish extrusive and intrusive rock phases in the study and surrounding areas.
- c. A total of 32 rhyolitic lava flows along with several felsic (Rhyolite) dykes is reported in Siwana, of which 5 flows are present in NB 2 block (Rhyolite flow 6, 7, 10,11 & 12).
- d. The NB-2 block is primarily situated within a pediment– pediplain complex, indicating prolonged erosion and denudational processes over crystalline terrain.
- e. Residual hills occur locally along the hill–pediment interface, suggesting differential resistance of litho-units and possible intrusive bodies.
- f. The committee observed that the agency has collected grab samples, however, it was specified during Joint TCC to collect channel samples.

  
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**Recommendations of Joint TCC:**

***The committee reviewed the progress of work and suggested the agency to expedite the work and initiate the drone survey. The project would be reviewed after 2 months.***

**Agenda 8.3.3 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**

**(M/s United Exploration India Pvt. Ltd.)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The NB-3 block lies within the Siwana Caldera of the Malani Igneous Suite, characterized by polyphase Neoproterozoic magmatism and bimodal volcanism.
- c. The block consists of aeolian sand, tuffaceous beds, Siwana Granite, rhyolite flows, and several microgranite, felsite, and dolerite dykes, trending NE–SW and NW–SE.
- d. Structurally, the block forms part of the northwestern margin of the Siwana Ring Complex, where volcanic flows dip moderately towards the centre of the caldera, likely influenced by subsidence along ring-dyke fractures.
- e. Out of 2 sq km area 0.758 sq. km. area comes under forest land which is 37.5% of the total block area.
- f. The agency informed, applications for forest clearance have been submitted via the Aranyak Portal and the Parivesh Portal and are currently under process as per regulatory guidelines.
- g. The agency apprised the committee Geophysical desktop study was undertaken by reinterpretation of existing ground and airborne geophysical dataset, characterize GP signals with the rock types by overlay analysis.
- h. Geological mapping (1:2000 scale) of 1.70 sq. km in the block with collection of 27 BRS samples completed.
- i. Analytic Signal map represents moderate to high amplitudes in the southern and central NB3 reflect intrusive contacts and lithological transitions, indicating structurally controlled zones favorable for REE enrichment.
- j. Tilt Derivative map represents continuous linear zero-contour trends that delineate structural boundaries and fracture zones within the block.
- k. NB3 is intersected by multiple linear trends (NE– SW, NW–SE), along with a prominent E–W lineament in the southern part, forming structural intersections that indicate fracture-controlled pathways for fluid migration and mineralization.
- l. The committee suggested the agency in Siwana area, Uranium and Thorium is not reported, hence, radiometric survey is not required.

**Recommendations of Joint TCC:**

***The committee reviewed the progress of work and suggested the agency to expedite the work as per the approved quantum. The project would be reviewed after 2 months.***

**Agenda 8.3.4 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**

**(M/s GeoExpore Pvt. Ltd.)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The agency apprised the committee geological mapping, pitting/trenching have been completed and geophysical survey is under progress. 75 BRS and Channel Samples have been analysed, of which TREE values in 43 samples are above 1000ppm.
- c. The block comprises of Rhyolite flow 14, 15, 16, 17, 22, 23, 24, 25, tuff, felsic dyke, rhyolite dyke, basalt and Aeolian sand.
- d. The committee was also informe, REE system at NB5 is fundamentally LREE-dominated.
- e. The agency presented tentative borehole plan for 5 boreholes of phase-1.


**Recommendations of Joint TCC:**

***The committee reviewed the progress of work and suggested the agency to initiate the drilling of 5 boreholes approved in the 1<sup>st</sup> phase. The project would be reviewed in 2 months and after drilling.***

**Agenda 8.3.5 Preliminary Exploration (G3) for REE and associated critical minerals in the NB 9 & NB 10 block (2.85 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan**

**(MECL)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The agency informed that geophysical data & ASTER data interpretation, detailed geological mapping (1:2000 scale) and collection of 23 BRS samples have been completed.
- c. The agency also informed that topographical survey and tendering for drilling is under progress.
- d. The agency presented the Reduced to Pole (RTP) magnetic map, the RTP in the map is ranges from 10101.8 to -4102.1 nT and within the Block area magnetic anomaly zone, ranges from -4000 nT to -600 nT.
- e. The analytical signal map shows a sharp gradient transition from the high magnetic zone into the block and a strong arcuate high-amplitude magnetic high passes just north of the block.
- f. The Hx and Hy derivative maps indicate that the block lies in a structurally controlled (transition zone) adjacent to a major arcuate magnetic lineament.
- g. From the desktop study, it is interpreted that the block is dominated by low magnetic response, correlating well with mapped granite exposures in the surroundings of the block. Continuity of low magnetic signatures suggests subsurface extension of granite beyond exposed areas, forming a concealed intrusive body. The arcuate geometry and sharp magnetic gradients indicate structurally controlled contacts.

  
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- h. The agency presented the Geological map and borehole plan of the block, it was observed out of 2.85 sq. km., the entire area is soil covered and outcrop of granite is only exposed in 0.05 sq. km. area.

**Recommendations of Joint TCC:**

*The committee reviewed the progress of work and suggested the agency to initiate the drilling of 5 boreholes approved in the 1<sup>st</sup> phase representing the entire block. The project will be reviewed after 2 months.*

**Agenda 8.3.6 Preliminary Exploration (G3) for REE and associated critical minerals in the NB 11 block (2.0 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan**

**(FCI Aravali Gypsum and Minerals India Ltd.)**

- The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- The proposed block area partly falls under Survey of India Toposheet numbers 45C/06, in and around the villages of Bhati Khera, Meli, Kumpawas.
- The agency apprised the committee, Geological mapping, geophysical survey, pitting/trenching have been completed.
- The Rhyolite flows in the block are trending ENE-WSW to E-W and dipping towards SSE to southernly and the dip of the beds varies between 20-30° and 60-65° at places.
- The agency also informed, Rhyolite flow 14, 18, 19, 21, 24, 25 & 26 have been mapped in the block. The avg. TREE values in various flows in the block varies from 761 ppm to 3354 ppm.
- The committee reviewed the project and observed, the agency lacks proper compilation and integration of geological and geophysical data.

**Recommendations of Joint TCC:**

*The committee suggested the agency to carry out proper compilation, collation and integration of geological and geophysical data and suggested to review the project after 2 months.*

**Agenda 8.3.7 Preliminary Exploration (G3) for REE and associated critical minerals in the NB 12 block (2.0 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan**

**(M/s NRD TATA Steel Ltd.)**

- The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- The block is located near Kuship Village in Balotra District of Rajasthan.
- Regionally the block falls in the Trans-Aravalli region, exposed around west and southwest of Aravalli Mountain Range.
- The primary features in the area are defined by the flow layers, columnar structure along with vesicles and amygdaloids in the rhyolite.
- Out of the total 2.0 sq. km area, about 0.46 sq. km (23%) consists of rocky terrain with surface exposure of rhyolite, while the remaining 77% is characterized by flat topography covered with sandy soil.

  
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- f. In the northern part of the block Flow 25 and Rhyolite dykes are exposed. REE values in Rhyolite ranges from 566-1389 ppm.
- g. Flow 25 is rhyolite with varying colors from reddish brown and often contains ash material at the top part. Both tabular and lath-shaped phenocrysts of K- feldspar are present within fine-grained groundmass. Phenocryst size varies from 1mm to 5mm with phenocryst to groundmass ratio 02:98.
- h. The total magnetic intensity (TMI) and reduced to pole map (RTP) of NB-12 block shows high magnetic intensity anomaly at northern side which are trending towards NE-SW direction and low magnetic anomaly occurred very adjacent to high magnetic anomaly with same trends.
- i. The high K counts are observed over northern side of NB12 block. These high counts are possibly related with the rhyolite outcrops in the area.
- j. 7 samples were collected, of which 5 samples were collected from Flow 25 and 2 samples from rhyolite dykes. REE values of these samples ranges from 842 - 5490 ppm having average value of 3189 ppm. LREE ranges from 539 - 3512 ppm and HREE ranges from 303 – 1979 ppm.
- k. Total three potential zones (NB12-1, NB12-2 & NB12-3) are marked based on synthesization and correlation of the data of both magnetic and radiometric surveys.
- l. The borehole plan was approved for 5 boreholes of phase-1.

**Recommendations of Joint TCC:**

***The committee reviewed the progress of work and suggested the agency to initiate the drilling of 5 boreholes approved in the 1<sup>st</sup> phase. The project would be reviewed after 2 months.***

**Agenda 8.3.8 Preliminary Exploration (G3) for REE and associated critical minerals in the NB 13 block (2.0 sq. km.) in the northern part of the Siwana Ring Complex, Balotra district, Rajasthan**

**(M/s NRD TATA Steel Ltd.)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The block is located near Kuship Village in Balotra District of Rajasthan.
- c. Regionally the falls in the Trans-Aravalli region, exposed around west and southwest of Aravalli Mountain Range.
- d. Out of the total 2.0 sq. km area, approximately 0.33 sq. km (17%) is occupied by rocky terrain with exposed rhyolite at the surface, while the remaining 83% comprises flat topography covered with sandy soil.
- e. In the northern part of the block Flows 25, 26 and Rhyolite dykes are exposed. REE values in Flow 25 ranges from 2731 to 3429 ppm and in Rhyolite dyke is 1262ppm (1 sample).
- f. Flow 26 is rhyolite in composition, consisting of tabular and lath-shaped K-feldspars along with few specks of glass within brown- coloured groundmass. Size of the phenocrysts varies from 1mm to 5cm and approximate P: G ratio is 10:90.
- g. The TMI & RTP maps show distinct high & low magnetic anomalies along the regional NE trend. The magnetic breaks occur between these high anomaly zones.

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- h. The high U counts are observed over north central part of NB13 block, these high anomalies are possibly related with rhyolite outcrops.
- i. 13 samples were collected, of which 3 samples were collected from Flow 26, 2 samples from the contact zone between flow 25 and flow 26, 3 samples from rhyolite dyke, 1 sample from alluvium and 4 samples from Flow 25. REE values of these samples ranges from 135 - 5271 ppm having average value of 2151 ppm. LREE ranges from 113 - 3420 ppm and HRR ranges from 23 - 2211 ppm.
- j. Two potential zones (NB13-1 & NB13-2) are marked over Th/U and RTP maps.
- k. The borehole plan was approved for 5 boreholes of phase-1.

**Recommendations of Joint TCC:**

*The committee reviewed the progress of work and suggested the agency to initiate the drilling of 5 boreholes approved in the 1<sup>st</sup> phase. The project would be reviewed after 2 months.*

**Agenda 8.3.9 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**

**(M/s Gemcokati Exploration Pvt. Ltd.)**

- a. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- b. The agency apprised the committee, topographical survey, geological mapping, reinterpretation of geophysical survey work have been completed.
- c. The agency also informed that 1<sup>st</sup> phase of drilling has been completed and 250 nos. of core samples have been collected.
- d. The agency presented the borehole locations in the geological map, the committee observed that, the boreholes did not represent the entire block.
- e. It was also observed that the agency proceeded with drilling without obtaining prior approval of the borehole plan.

**Recommendations of Joint TCC:**

*The committee reviewed the progress of work and observed the boreholes drilled by the agency did not represent the entire block and suggested to review the project after 2 months.*

**Agenda 8.3.10 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**

**(M/s Ocean Drilling and Exploration Pvt. Ltd.)**

- f. The project was approved in the 3<sup>rd</sup> PSC meeting held on 15.12.2025.
- g. The proposed block lies in northern part of Siwana ring complex (SRC) in toposheet 45C/6 lying in Balotra district, Rajasthan.
- h. The area encompasses 8 rhyolitic flows, flow 12 to 15 and flow 25 to 28 (flow 12 being the North most and 28th being the south most). The lithology exposed in the block comprises of rhyolite flow and later intruded by felsic dykes along with aeolian sand.

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- i. The agency apprised the committee, geological mapping, collection of BRS samples, channel samples is completed and trenching is under progress.
- j. The agency has submitted 93 samples from BRS/Channel/trench/core sample for analysis of which 56 samples have been analysed by HR-ICPMS.
- k. Based on chemical analysis data of 203 BRS from rhyolite samples of study area yielded  $\Sigma\text{REE}+\text{Y}$  values ranging from 91.76ppm to 10130ppm, with average value of 1844.84ppm.
- g. Seven potential REE mineralization zones (Z-1 to Z-7) delineated from integrated analysis aeromagnetic and radiometric data.
- h. Dominant structural trend is ENE-WSW to E-W, consistent with the regional Siwana Ring Complex dyke architecture.
- i. Zones Z-1, Z-3, Z-6, and Z-7 are ranked as high-priority targets based on coincident with dominant magnetic anomalies Th-U enrichment, and structural control.
- j. The borehole plan was approved with 2 boreholes to be drilled in the exposed area and 3 boreholes in soil covered area.

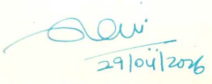
**Recommendations of Joint TCC:**

***The committee reviewed the progress of work and suggested the agency to drill 2 boreholes in the exposed area and 3 boreholes in soil covered area.***

**Agenda 8.3.11 Regional Mineral Targeting in Madanpur-Rampur-Kankatru areas to identify prospective blocks of REE, Base Metal & other mineralization in Kalahandi District, Odisha**

**(M/s NRD TATA Steel Ltd.)**

- a. The project was recommended in the Joint TCC meeting and sanctioned on 04.09.2025 with an approved cost of Rs. 523.76 lakh.
- b. The proposed RMT block of 1087 sq. km area falls in parts of Toposheet nos. 64P/7, P/8, P/11, P/12 and 65 M/5 in Kalahandi district, Odisha.
- c. The agency apprised the committee, Phase-I work i.e, Remote sensing analysis and integration of datasets (NGCM, NGPM, airborne geophysics, geology, structures, outcrops, mineral occurrences, seismo-tectonics, geochronology, ASTER alterations) have been completed. Review of ME reports and GIS-based plotting of selected data (drilling, alteration minerals, geophysics) for predictive geological mapping have also been completed.
- d. The committee was informed, GSI had carried out reconnaissance survey (G4) for Manganese in Tekartola-Brahmani block, Kalahandi district of Odisha in FS 2017-18 and had demarcated 4 bands of Manganese mineralization with 100 BRS and 50 PTS samples within Tekartola block.
- e. The project was reviewed during the 6th Joint TCC meeting where in the committee suggested to prepare the following:
  - (1) Residual gravity, (2) 1st VD, and (3) Bouguer gravity of the area with 2km buffer around the assigned area. Digitisation of shallow (4) gravity domains, (5) gravity breaks and (6) gravity lineaments. Suitable buffers based on the degree





of lineaments are to be assigned. All six maps are to be used for prospectivity analysis. Similarly, from the Magnetic data (consult NGDR for availability of low altitude aeromagnetic data), prepare six to seven different maps. Here, Residual magnetic (RMI), Analytical signal (AS), 1st VD AS, RTP. The total HREE, TLREE, from NGCM are to be prepared separately for analysis with other data sets. Additionally, prepare manganese, cobalt, Ni, PGE, and other critical anomaly maps from NGCM. From the ASTER data, prepare alteration mineral data using VNIR, SWIR, and TIR for all alteration maps connected to REE, Mn, Graphite, Mn, Co, and other critical minerals. Similarly, utilise satellite data of ISRO/ NRSA. Available primary bedrock sample geochemical map, boreholes, pit/ trench etc., also to be used. Please make use of all these areas for training the data sets to delineate potential zones for REE, Mn, Co and applicable critical minerals. Regular Index Overlay, Fuzzy, etc., and AI/ ML (RF, CNN) may be applied for generating mineral potentiality maps.

- f. The agency complied with the above suggestions of the committee and presented the work.
- g. The committee was also informed, two (02) REE potential mineralized zones/blocks were demarcated based on Prospectivity Analysis and field validation, sampling and chemical analysis and petrological studies.
- h. Total cumulative area of potential/prospective zones is ~394 sq.km. for Phase –II study.
- i. The committee suggested the agency to initiate traverse mapping on 1:25,000 scale as per the approved quantum in phase-II along with Collection of few BRS / Chip/ Channel Samples, S /SSS/ Regolith samples, petrological / whole Rock samples.

#### **Recommendations of Joint TCC:**

***The committee reviewed the progress of work and suggested the agency to initiate traverse mapping on 1:25,000 scale as per the approved quantum in phase-II along with Collection of few BRS / Chip/ Channel Samples, S /SSS/ Regolith samples, petrological / whole Rock samples. The project will be reviewed after completion of phase-II activity.***

#### **8.4 Review of Ongoing Baseline Data Generation Projects**

**Agenda 8.4.1 Deep-seated mineral prognosis by geophysical techniques: Lithospheric structure and relationship with kimberlite clusters of Kalyandurg-Timmasamudram-Chigicheria, District: Anantapur, Andhra Pradesh.**

**[Implementing Agency: GSI-CSIR- National Geophysical Research Institute]**

- a. The agency informed that the project was approved in the 25th EC Meeting held on 29th June, 2022. The sanction order was issued on 17th February, 2023 with timeline of 24 months and approved cost was INR 2,59,97,784/-.





- b. The committee was apprised, the GR has been submitted on 23.12.2025, however, the timeline extension was accorded only till 30.11.2025.
- c. The agency sought extension of timeline upto 31.12.2025 for final submission of GR.

**Recommendation of TCC:**

***The committee recommended timeline extension upto 31.12.2025 for approval of PSC of NMEDT. The recommendation is made for submission of GR.***

## 8.5 Other Agendas

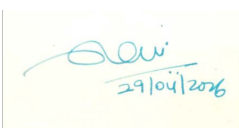
### **Agenda 8.5.1 Discussion to be done regarding payment related to forest clearance pertaining to execution of exploration block on reimbursement basis**

- a. The agenda was brought to Joint TCC for decision regarding payment related to forest clearance.
- b. The committee was informed that several agencies have requested for related to forest clearance pertaining to execution of exploration block on reimbursement basis.
- c. MECL stated that forest clearance for NMEDT funded exploration projects involves a multi-component statutory payment framework. While existing provisions have supported project execution, field realities now call for a calibrated policy alignment
- d. Forest clearance demands include NPV, compensatory afforestation charges, and administrative levies — all mandatory prerequisites for commencement of exploration.
- e. Existing provisions enables reimbursement of NPV component only.
- f. Accordingly, it was requested that reimbursement provisions may be extended to cover all statutory forest clearance payments raised by Forest Authorities.
- g. The committee pointed out that as per MoEF&CC clarification (Jan 2025), up to 25 boreholes can be permitted for exploration based on requirement, not strictly proportional to area. This is important for G3/G4 proposals where earlier restrictions were stricter.
- h. The committee also opined that discussion regarding change in existing policy and guidelines is beyond the scope of present committee. However, the issue may be taken up with competent authority.

**Recommendations of Joint TCC:**

***The committee stated that discussion regarding change in existing policy and guidelines is beyond the scope of present committee. However, the issue may be taken up with competent authority.***

### **Agenda 8.5.2 Discussion regarding number of GR to be generated for one project where multiple blocks and accordingly, re-costing of following 3 projects**



- a. The Committee was informed that some projects comprise multiple blocks under a single project framework.
- b. It examined the issue of the number of reports to be prepared and the applicable charges for such multi-block projects.
- c. The Committee opined that separate Geological Reports (GRs) should be prepared for each sub-block to meet auction requirements, and report preparation charges will be applicable for each sub-block accordingly.
- d. It was further decided that all sub-block reports may be reviewed by the same peer reviewer; therefore, a single peer review charge will be applicable for the entire project.
- e. In line with TCC's decision, the cost sheets for projects listed under items 8.5.2.1, 8.5.2.2, and 8.5.2.3 have been revised.

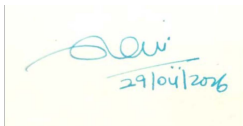
**Agenda 8.5.2.1 Preliminary Exploration (G-3) of Limestone in Bandha Block (3.54 sq. km) and Jamuniya Block (3.68 sq. km) in District Satna, Madhya Pradesh.**

**Implementing Agency: MECL**

- a. The project was approved in 3<sup>rd</sup> PSC meeting held on 15.12.2025. The sanction order was issued on 8<sup>th</sup> January, 2026 with timeline of 10 months (upto 7.11.2026) and approved cost was INR 2,19,44,208/-.
- b. The cost of project revised as per discussion made in Agenda 8.5.2.

**Recommendations of Joint TCC:**

***The project is recommended to PSC, NMEDT for revision of cost from Rs. 219.44 lakh to Rs. 219.09 lakh with a change in amount of (-) Rs. 0.35 lakh (~0.16 % de-escalation) as per Annexure 5.***



**Preliminary Exploration (G-3) of Limestone in Bandha Block (3.54 sq. km) and Jamuniya Block (3.68 sq. km), covering a total area of 7.22 sq. km in District Satna, Madhya Pradesh. Total Drilling: 1000 m; 12 boreholes (depth range 80–100 m) within Timeline of 10 months; Review after 5 months**

S. No.	Item of Work	Unit	Rates as per NMET SoC 2020-21		Estimated Cost of the Proposal		Revised Cost of the Proposal		Remarks
			SoC-Item -Sl No.	Rates as per SoC	Qty.	Amount (Rs)	Qty.	Amount (Rs)	
<b>A</b>	<b>GEOLOGICAL WORK</b>								
<b>1</b>	<b>Geological Mapping (1:4000) with contouring, Borehole logging, sampling &amp; Report writing</b>	per sq. km.	1.1	18,300	7.22	132,126	7.22	132,126	
i	Charges for Geologist- Field	day	1.2.1 a	14,500	150	2,175,000	150	2,175,000	For two blocks and two geologist
ii	Charges for one Geologist - HQ	day	1.2.1 a	10,500	40	420,000	40	420,000	
iii	2 labours	day	5.8	541	300	162,300	300	162,300	
iv	Core Sampling -01 Sampler Labour charge not included	day	1.2.1 b	7,850	139	1,091,150	139	1,091,150	
v	4 labours/ party (As per rates of Central Labour Commissioner)	day	5.8	541	556	300,796	556	300,796	
<b>2</b>	<b>Survey</b>							-	
i	Topographical Survey including geological mapping	day	1.3.1	10500	40	420000	40	420,000	
ii	4 labours/ party	day	5.8	541	160	86,560	160	86,560	
iii	Bore Hole Fixation and determination of co-ordinates & Reduced Level of the boreholes by DGPS and boundary coordinates	Per Point of observation	1.3.2	24,000	19	456,000	19	456,000	12 BHs and 07 boundary points

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				<b>Sub Total- A</b>		<b>5,243,932</b>		<b>5,243,932</b>	
<b>B</b>	<b>DRILLING (in-house)</b>								
i	Drilling upto 300m (1 rig )-Soft Rock	m	2.2.1.1c	5,500	1,000	5,500,000	1,000	5,500,000	Average 80m depth per borehole, if limestone continuing beyiong 80m all boreholes can be drilled upto 100m. <b>2 deeper BH will be reviewed during 1st review</b>
ii	Land / Crop Compensation	per BH	5.6	30,000	12	360,000	12	360,000	As per actuals as certified by local authorities subject to a maximum of 30,000 per bore hole
iii	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7	2,000	19	38,000	19	38,000	12 BHs and 07 boundary points
iv	Transportation of Drill Rig & Truck associated per drill (2 rigs)		2.2.9 (2)	Miscellaneous Charges (Transportation of Drilling Rig, Accommodation for Drill Camp, Camp setting and winding, construction of Approach road and Drill core preservation)		1,100,000		1,100,000	For Drilling cost more than 50 Lakhs and less than 1 Crore : 20% of the Drilling Cost with a maximum ceiling of ₹ 15 lakh.
v	Monthly Accommodation Charges for drilling Camp (up to 2 Rig)								
vi	Drilling Camp Setting Cost (2 rigs)								
vii	Drilling Camp Winding up Cost (2 rigs)								
viii	Approach Road Making (Flat Terrain)								
ix	Core Preservation: One complete borehole plus mineralised cores of all the remaining Bhs (950 m to be preserved)								
				<b>Sub Total- B</b>		<b>6,998,000</b>		<b>6,998,000</b>	
<b>C</b>	<b>LABORATORY STUDIES</b>								
<b>1</b>	<b>Chemical Analysis</b>								
<b>i</b>	<b>Primary &amp; Check samples for Limestone</b>								

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	Major oxides (WD XRF)- (oxides+ traces -24 elements)	Nos	4.1.17a	4,200	10	42,000	10	42,000	Samples to be collected during mapping
	Borehole Primary samples Major oxides (WD XRF)- (oxides+ traces -24 elements)	Nos	4.1.17a	4,200	950	3,990,000	950	3,990,000	
	External(10%) Check samples from NABL Lab Borehole Primary samples Major oxides (WD XRF)- (oxides+ traces -24 elements)	Nos	4.1.17a	4,200	95	399,000	95	399,000	
<b>2</b>	<b>Physical &amp; Petrological Studies</b>								
i	Preparation of thin section	Nos	4.3.1	500	6	3,000	6	3,000	
ii	Complete petrographic /ore microscopic study/mineragraphic report of rock sample ( along with 5 nos. digital photo micrographs)	Nos	4.3.4	2,800	6	16,800	6	16,800	
iv	Bulk Density studies	Nos	4.8.3	2,500	4	10,000	4	10,000	
						<b>Sub Total- C</b>		<b>4,460,800</b>	
<b>D</b>						<b>Total A to C</b>		<b>16,702,732</b>	
<b>E</b>	<b>Geological Report Preparation</b>		<b>5.2 (iii)</b>	Total cost of the project exceeding ₹150 lakh ₹7.5 lakh		<b>1,500,000</b>		<b>1,500,000</b>	Reimbursement will be made after submission of the final Geological Report in Hard Copies (5 Nos) and the soft copy to NMET. Considering preparation of 2 separate GR's

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F	Peer review Charges		As per EC decision			60,000		30,000	Considering review of 2 separate GR's
G	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	5 Hard copies with a soft copy	5.1	2% of the Cost or Rs. 5 Lakhs whichever is lower		3,34,055		3,34,055	
H	Total Estimated Cost without GST					18,596,787		18,566,787	
I	Provision for GST (18% of I)					3,347,422		3,342,022	GST will be reimburse as per actual and as per notified prescribed rate
J	Total Estimated Cost with GST					21,944,208		21,908,808	
				Say in Lakhs		219.44		219.09	
<b>Note:</b>									
1	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>								
2	<b>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.</b>								
3	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>								
4	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>								
5	<b>Any item of work not mentioned above shall be added as per SoC.</b>								
6	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>								

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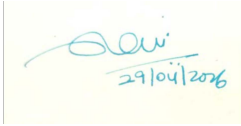
**Agenda 8.5.2.2 Preliminary Exploration (G3) for Limestone in Paradva-Amrapar Blocks A-B-C-D, Jamnagar District, Gujarat.**

**Implementing Agency: CGM, Gujarat**

- a. The project was approved in 5<sup>th</sup> PSC meeting held on 02.02.2025. The sanction order was issued on 11<sup>th</sup> March, 2026 with timeline of 8 months (upto 10.11.2026) and approved cost was INR 1,31,85,547/-.
- b. The cost of project revised as per discussion made in Agenda 8.5.2.

**Recommendations of Joint TCC:**

***The project is recommended to PSC, NMEDT for revision of cost from Rs. 131.86 lakh to Rs. 130.79 lakh with a change in amount of (-) Rs. 1.07 lakh (~0.81 % de-escalation) as per Annexure 6.***



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**Preliminary Exploration for Limestone in Paradva-Amrapar Blocks A-B-C-D , Jamnagar District, Gujarat**  
**Area: 9.07 sq.km, Total Drilling : 420 m, BH Nos.: 21, Depth: 20m, Timeline : 8 months , Review : After 3 and 6 months**


S. No.	Item of Work	Unit	Rates as per NMEDT revised SoC 2025-26		Estimated Cost of the Proposal		Revised Cost of the Proposal		Remarks
			SoC-Item -SI No.	Rates as per SoC	Qty.	Total Amount (Rs)	Qty.	Total Amount (Rs)	
<b>A</b>	<b>Geological Mapping Other Geological Work &amp; Surveying</b>								
	Geological mapping including contouring (1:4000 scale)		1.1	18300	9.07	165,981	9.07	165,981	
i	a. Charges for Geologist per day (Field) for geological mapping & drilling work	day	1.2.1a	14500	120	1,740,000	120	1,740,000	Detailed Geological Mapping on scale 1:4000, Core logging, Sampling
ii	Labours Charges (2 Nos)	day		541	240	129,840	240	129,840	
iii	Charges for Geologist per day (HQ)		1.2.1a	10,500	45	472,500	45	472,500	
iv	Charges for one Sampler per day (1 Party)	one sampler per day	1.2.1b	7850	65	510,250	65	510,250	
v	Labours (4 Nos)	day		541	260	140,660	260	140,660	
	<b>Sub Total- A</b>					<b>3,159,231</b>		<b>3,159,231</b>	
<b>B</b>	<b>Survey work</b>								
a	DGPS Survey for BH fixation & RL determination/ Boundary Point	Per Point of observation	1.3.2	24000	37	888000	37	888000	21 BH + 16 cardinal points for all the 4 blocks
b	Charges of Surveyor (1 party) for survey layout work & Block boundary demarcation	one surveyor per day	1.3.1	10500	30	315000	30	315000	Topographic survey - contour interval: 4 m.

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c	Labours Charges for survey work; (4 Nos)	day	5.7	541	120	64920	120	64920	
	<b>Sub-Total B</b>					<b>1,267,920</b>		<b>1,267,920</b>	
<b>C</b>	<b>DRILLING (after review) (outsourced)</b>								
1	Drilling (Outsourcing)	m	2.2.1.1 c	5500	420	2,310,000	420	2,310,000	Paradva-Amrapar-A Block (100 m) Paradva-Amrapar-B Block (80 m) Paradva-Amrapar-C Block (180 m) Paradva-Amrapar-D Block (60 m)
2	Land / Crop Compansation (in case the BH falls in agricultural Land)	per BH	5.6	21	30,000	630,000	30,000	630,000	As per actuals
3	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7	2000	21	42,000	21	42,000	
10	Technical Supervision for outsourcing of drilling		6	In case of outsourcing of work, the Technical Supervision cost shall be 10% of the sum of all the outsourced work components with a maximum ceiling of ₹ 20 lakh.		231,000		231,000	420 m core to be preserved
	<b>Sub Total C</b>					<b>3,213,000</b>		<b>3,213,000</b>	
<b>D</b>	<b>LABORATORY STUDIES</b>								
1	<b>Chemical Analysis</b>								
i)	<b>Geochemical Sampling-Surface</b>								

  
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	<b>samples (Bedrock/Channel /Soil/Stream sediment)</b>								
	a. Primary analysis (major oxides by XRF analysis)	Nos	4.1.17a	4200	50	210,000	50	210,000	Bed rock samples
ii)	<b>Surface Check samples (10% External)</b>								
	a. Primary analysis (major oxides by XRF analysis)	Nos	4.1.17a	4200	5	21,000	5	21,000	Bed rock samples
v)	<b>BH Core samples</b>								
	a. Primary analysis (major oxides by XRF analysis)	Nos	4.1.17a	4200	420	1,764,000	420	1,764,000	
	c. For PGE	Nos							
vi)	<b>BH Core samples (10%External)</b>								
	a. Primary analysis (major oxides by XRF analysis)	Nos	4.1.17a	4200	42	176,400	42	176,400	
2	<b><u>Physical &amp; Petrological Studies</u></b>								
i	Preparation of thin section	Nos	4.3.1	500	10	5,000	10	5,000	
ii	Study of thin section	Nos	4.3.4	2800	10	28,000	10	28,000	Complete petrography study (along with 5 nos. digital photo micrographs)
vii	Bulk Density	Nos	4.8.3	2,500	5	12,500	5	12,500	
	<b>Sub Total D</b>					<b>2,216,900</b>		<b>2,216,900</b>	

  
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<b>E</b>	<b>Total A to D</b>					<b>9,857,051</b>		<b>9,857,051</b>	
<b>I</b>	<b>Geological Report Preparation</b>	<b>5 Hard copies with a soft copy</b>	5.2 (ii)	Total cost exceeding ₹50 lakh but less than 150 lakh: ₹2.5 lakh	<b>2.5 lakh * 4 (reports)</b>	<b>1,000,000</b>		<b>1,000,000</b>	Paradva-Amrapar-A Block (5 copies) Paradva-Amrapar-B Block (5 copies) Paradva-Amrapar-C Block (5 copies) Paradva-Amrapar-D Block (5 copies)
<b>J</b>	<b>Peer review Charges</b>		<b>As per EC decision</b>	30,000	<b>30000*4</b>	<b>120,000</b>		<b>30,000</b>	Only 1 Peer Reviewer to be assigned
<b>K</b>	<b>Preparation of Exploration Proposal (5 Hard copies with a soft copy)</b>	<b>5 Hard copies with a soft copy</b>	<b>5.1</b>	2% of approved project Cost or Rs. 5 Lakhs whichever is lower		<b>197,141</b>		<b>197,141</b>	EA will be reimbursed after submission of the Hard Copies and the soft copy of the final proposal along with Maps and Plan as suggested by the TCC-NMET in its meeting while clearing the proposal.
<b>L</b>	<b>Total Estimated Cost without GST</b>					<b>11,174,192</b>		<b>11,084,192</b>	
<b>M</b>	<b>Provision for GST (18% )</b>					<b>2011354.56</b>		<b>1,995,154.56</b>	GST will be reimburse as per actual and as per notified prescribed rate
<b>N</b>	<b>Total Estimated Cost with GST</b>					<b>13,185,547</b>		<b>13,079,347</b>	
				<b>or Say Rs. In Lakhs</b>		<b>131.86</b>		<b>130.79</b>	
<b>Note:</b>									
<b>1</b>	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>								

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2	<b>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.</b>
3	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>
4	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>
5	<b>Any item of work not mentioned above shall be added as per SoC.</b>
6	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>

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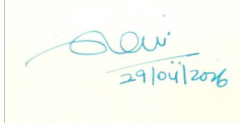
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**Agenda 8.5.2.3 Preliminary Exploration (G-3) for Limestone in Prashnawada Block-A & Kadwasan Block-B, District: Gir Somnath, State: Gujarat  
Implementing Agency: APC Drilling & Construction Pvt. Ltd.**

- a. The project was recommended by TCC-I in its 92<sup>nd</sup> meeting with an estimated cost of Rs. 2,12,41,241/-.
- b. The project is to be placed in upcoming PSC meeting for approval.
- c. The cost of project is revised as per discussion made in Agenda 8.5.2.

**Recommendations of Joint TCC:**

***The committee recommended the proposal titled “Preliminary Exploration (G-3) for Limestone in Prashnawada, Block-A & Kadwasan, Block-B, District: Gir Somnath, State: Gujarat” for approval of PSC, NMEDT with an estimated cost of Rs. 212.06 lakhs (including GST) within time schedule of 8 months for carrying out the proposed work and submission of report as per Annexure – 7A & 7B. The item will be reviewed after 3 and 6 months.***



**Preliminary Exploration (G-3) for Limestone in Prashnawada Block-A & Kadwasan Block-B, District: Gir Somnath, State: Gujarat  
[Block area-16.70 sq. km; BH-23 Nos; Total Drilling-1010 m [Prashnawada:210 m (7 BH of 30 m depth each); Block B; 800m (16 BH , each of 50 m depth)], ;  
Schedule timeline- 8 months; Review- After 3 and 6 months]**

SL No.	Item of Work	Unit	Rates as per NMET SoC		Estimated Cost of the Proposal		Remarks
			SoC-Item - SI No.	Rates as per SoC	Qty.	Amount (Rs)	
A	<b>GEOLOGICAL WORK &amp; TOPOGRAPHICAL SURVEY (1:4000 scale)</b>						
i	Geological Mapping (Prashnawada 5.10 + Kadwasan 11.60)	Sq.km	1.1	18300	16.7	305610	
ii	Charges for one Geologist- Field	day	1.2.1a (b)	14500	100	1450000	
iii	Charges for one Geologist - HQ	day	1.2.1a (a)	10500	30	315000	
iv	2 labours / Party(As per rates of Central Labour Commissioner)	day	5.8	541	200	108200	
v	Sampling Party days-1 Samplers	day	1.2.1b	7850	120	942000	
vi	4 labours/ party (As per rates of Central Labour Commissioner)	day	5.8	541	480	259680	
vii	Survey Party Days for DGPS topographical contour survey, BH fixation and RL determination	day	1.3. 1	10500	20	210000	
viii	Boundary survey by DGPS	Nos	1.3.2	24000	21	504000	Cardinal points
ix	4 labours for surveyor	day	5.8	541	80	43280	
			<b>Sub Total- A</b>		<b>4137770</b>		
B	<b>DRILLING (In house)</b>						
i	Drilling upto 300m (Soft Rock) (2 rigs ) (Prashnawada - 210+ Kadwasan -800)	m	2.2.1.1c	5500	1010	5555000	Block-A-7 BH(depth 30m) & Block-B 16 BH (50 m) (MoC RATE)
ii	Land / Crop Compensation	per BH	5.6	30000	23	690000	As per actuals with 30000 being ceiling
iii	Construction of concrete Pillar (12"x12"x30") (23 BH Pillar +21 Boundary Pillar)	per borehole	2.2.7	2000	44	88000	
iv	Miscellaneous charges -Transportation of Drill Rig, Accomodation of Drill Camp, Camo setting & winding,Construction of Approach Road and Drill Core	Lumpsum	2.2.9			1111000	20 % or 15 Lakh if drilling cost more than 50 lakhs & <1Cr

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	Preservation (One complete borehole plus mineralised cores of all the remaining BHs)						
v	Bore Hole Fixation and determination of co- ordinates & Reduced Level of the boreholes by DGPS	Nos	1.3.2	24000	23	552000	23 Boreholes
	Drill Core Preservation	per m	5.3	1590	700	1113000	Block A: 1 complete BH + Mineralised core (150m) and Block B: 1 complete BH + Mineralised core (550m)
						<b>Sub Total- B</b>	<b>9109000</b>
<b>C</b>	<b>LABORATORY STUDIES</b>						
1	<b>Chemical Analysis</b>						
	Primary & Check samples for Limestone BRS/Pit/Chip/Channel/BH samples)						
	Complete analysis of dolomite/ limestone/gypsum/ clay/ manganese ore/ bauxite/ iron ore samples	Nos	4.1.11	3900	865	3373500	BH-815 BRS-50 (Prashnawada-20 & Kadwasan -30 )
	Check samples for Complete analysis of dolomite/ limestone/gypsum/ clay/ manganese ore/ bauxite/ iron ore samples	Nos	4.1.11	3900	87	339300	
	ICP-AES/ICPMS (sequential technique)	Nos	4.1.15	7400	10	74000	Per BH 2 samples
2	<b>Petrological samples ( BH Core Samples)</b>						
i	Preparation of thin section	Nos	4.3.1	500	10	5000	
ii	Study of Thin Section including photomicrographs	Nos	4.3.4	2800	10	28000	
3	<b>Mineral Physics Studies</b>						
iv	XRD Analyses for identification of minerals(Random)		4.5.2	4000	5	20000	
v	Specific Gravity Determination	Nos	4.8.1	2500	5	12500	From BH
						<b>Sub Total- C</b>	<b>3852300</b>
						<b>Total A to C</b>	<b>17099070</b>
D	Geological Report Preparation - including charges of typing text,, table etc., degitization of maps/ sectinons etc.,		5.2 (ii)	Cost per 5 copies of report along	2	500000	Total cost of the project exceeding 150 lakhs Reimbursement will be made after submission of the final Geological Report in Hard

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				with soft copy			Copies (5 Nos) and the soft copy to NMET. (2.5 lakhs *2). <b>The cost for separate block should be about 8500000/-</b>
E	Peer review Charges		As per EC	30000	1	30000	
F	Preparation of Exploration Proposal	5 Hard copies with a soft copy	5.1	2% of the Cost or Rs. 5 Lakhs whichever is lower		341981.4	
G	Total Estimated Cost without GST					<b>17971051</b>	
H	Provision for GST (18% of G)					<b>3234789</b>	GST will be reimburse as per actual and as per notified prescribed rate
I	Total Estimated Cost with GST					<b>21205841</b>	
	or Say Rs. In Lakhs					<b>212.06</b>	
Note:							
1	<b>Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.</b>						
2	<b>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.</b>						
3	<b>If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 6 of NMEDT SoC. In case of execution of the project by NEA/NPEA on its own, a Certificate regarding non outsourcing of any component/project is required.</b>						
4	<b>Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.</b>						
5	<b>Any item of work not mentioned above shall be added as per SoC.</b>						
6	<b>All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency</b>						

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**Time Schedule/ Action Plan for Preliminary Exploration (G-3) for Limestone in Prashnawada, Block-A & Kadwasan, Block-B, District: Gir Somnath, State: Gujarat**

Sl.		Months										
No.	Activities	1	2	3		4	5	6		7	8	
1	Camp Setting	■			R E V I E W				R E V I E W			
2	Geological Mapping & Sampling (Bed Rock)	■	■									
3	Survey Work(1 Party) (Topography + BH Survey)		■				■	■				
4	Drilling ( 2 rig)					■	■					
5	Geological Work(1 Geologist)	■	■	■		■	■	■		■		
6	Sampling Work -BRS/Core Samples		■	■		■	■	■		■		
7	Camp Winding							■		■		
8	Laboratory Studies		■	■		■	■	■		■	■	
9	Geological Work/ Report Writing							■		■	■	■
10	Peer Review and Report Submission											■

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**Agenda 8.5.3 To discuss the component HR-ICP MS (REE & Trace) approved in all the exploration projects of Siwana Ring Complex, Balotra District, Rajasthan.**


It was apprised to committee that during costing of previously allocated blocks (Total 16 blocks in Phase 1 and Phase 2), the analysis for REE was given by HR-ICPMS technique (4.1.16f of SoC, 2025). However, the agencies have informed that HR-ICPMS technique is available in comparatively few organizations.

Hence it was decided that the component may be replaced by ICPMS (sequential technique) as mentioned in point 4.1.15 of SoC, 2025. This does not have any financial implications, as the rate for both the techniques is Rs. 7400/- per sample.

**Agenda 8.5.4 Discussion on discrepancies in Chemical Analysis Data of Ujol Project reported by CGM, Gujarat.**

**[Implementing Agency: CGM Gujarat & Geovale Services Pvt. Ltd.]**

- a. The committee was informed that project titled "Reconnaissance Survey (G4) for Evaluation of Placer Xenotime Prospect in the Ujol River Basin, (eastern side having an area of 350 sq.km.), Gujarat" was sanctioned to CGM Gujarat with Geovale Services being the implementing agency.
- b. The GR of this project was submitted to NMEDT on 15.05.2025.
- c. During 22nd TCC-II meeting held on 4th and 5th February, 2026, the representative from CGM, Gujarat stated that analytical results from the said project showed discrepancies with REE values reported as 22000 ppm in original sample and 6000 ppm in check sample.
- d. Consequent to remarks made by CGM Gujarat, during 22<sup>nd</sup> TCC-II meeting, clarification was sought by NMEDT from CGM, Gujarat.
- e. CGM Gujarat informed that 7 counter samples were submitted to National Forensic Sciences University for independent cross-check analysis and comparative analysis revealed significant discrepancies between TREE values reported by Geovale Services Pvt. Ltd. and those obtained by NFSU for G4 reconnaissance samples from the Ujol River Basin.
- f. The committee was further informed that CGM Gujarat flagged anomalies in TREE values and directed Geovale Services Pvt. Ltd. to submit counter samples (>1000 ppm REE) in the month of July, 2025.
- g. Re-analysis of the 7 samples was also carried out by National Forensic Sciences University which revealed huge discrepancy in TREE values.
- h. The committee was further informed that the 68th TCC directed the agency to present the project after receipt of analytical results from National Metallurgical Laboratory, Jamshedpur. However, no analytical data from National Metallurgical Laboratory, Jamshedpur has been presented, discussed, or included in the Geological Report.
- i. The committee enquired CGM Gujarat about the discrepancies, in which CGM responded that the analysis has been carried out on counter samples provided by Geovale Services Pvt. Ltd.
- j. Geovale Services Pvt. Ltd. presented their work and responded that the variation in data may be attributed to variations in methodology adopted for processing of samples prior to analysis as well as in standard protocol analysis adopted by lab.
- k. The committee also highlighted that during 7th meeting of Joint TCC also, it was discussed that the reported HMC values are based on pre-concentrated heavy fractions after separation from sediments and do not represent in-situ bulk sediment grades; hence, the data is not reflective of the true potential of the area.





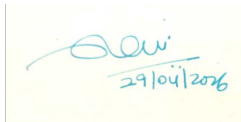
- l. The Committee noted that heavy liquid separation, liberation and modal analysis artificially enrich samples and are neither feasible nor recommended for realistic assessment of area potential.
- m. After detailed discussion, the committee decided that the 6-7 samples, in which discrepancy was noted, may be re analysed for verification.
- n. Geovale informed that the counter samples may not be available any more or if available may be insufficient in quantity.
- o. It was decided that the samples may be collected from the same coordinates again. The collection of samples may be done by geologists of Geovale along with GSI officers.
- p. The collected samples would be processed and analysed by GSI. A request to GSI in this regard would be made by TCC/NMEDT.
- q. The committee members also suggested the procedure to be followed for collection, preparation and analytical procedure to be adopted by agency (Annexure 8).

**Recommendations of Joint TCC:**

***The committee 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.***

**8.6 (Addl. Agenda) Allocation of block submitted by M/s Geovale Services Pvt. Ltd. in association with GSI**

- a. Geovale Services Pvt. Ltd. have carved out 5 blocks with cumulative ~4,500 sq. km target area on major river systems, palaeo-terraces and inland placer potential for systematic mapping and targeted geochemical evaluation on the basis of outcome of the recently concluded G-4 stage exploration for evaluation of placer xenotime prospect in Ujol river basin, Gujarat.
- b. The proposal was discussed in 7<sup>th</sup> meeting of Joint TCC and it was decided that one block may be allotted to an NPEA on a nomination basis for preliminary work for six months, involving systematic sampling, with further work to be considered based on analytical outcomes The Block No. 2, i.e., Sabarkantha block was selected for this purpose.
- c. Continuing with the decision, the committee decided that Sabarkantha block may be allocated to M/s Geomarine Services Pvt. Ltd., owing to their experience as well as recently completed work on placers along the Saurashtra Coast.
- d. Geomarine Services Pvt. Ltd. is instructed to submit the DPR in 15 days.

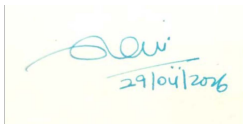
  
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**Resampling procedure for Ujol River Basin**

As per the discussion, the primary sample has been sieved into +650, -650+250, -250+125 and -125 micron sizes. The sub-sample under discussion is bromoform heavies of (BRH) of -150+125micron size fraction of this primary sample, and as of now, sufficient quantity for re-analysis is not available with the NPEA. In view of this, the joint committee recommended for resampling of the primary sample as per the procedure given below:

1. Resampling of the primary samples at field under discussion jointly by NPEA and officials of Geological Survey of India (to be nominated) from the same geo-coordinates. One representative portion of the sample collected will be retained by Geological Survey of India.
2. The processing of the sample will be as per the same procedure including sampling by coning and quartering followed by them as reported in their final report, to generate sufficient quantity of -250+125 micron, followed by heavy media separation by using bromoform to generate bromo-heavy fraction (BRH).
3. At least 50gm of the BRH may be sent to NMEDT for further sampling and analysis at designated laboratories. One set of samples may be analysed in the same laboratory where earlier results were generated.
4. In order ensure homogeneity of the sample, NMEDT may please get the sample homogenized to a size of about 74micron through a designated government agency, preferably GSI. Homogenisation may be carried out either by hand-grinding in a agate pestle and mortar or in a tungsten-carbide lined lab-scale vibratory cup mill. After homogenization, the sample may be divided into four parts by coning and quartering, two to be sent for chemical analysis in selected laboratories, and remaining two portions to be retained as reference stock sample.



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**List of participants attended 8<sup>th</sup> Joint Meeting (Additional Session) of Technical-cum-cost Committees (TCC-I & TCC-II) of NMEDT held on 17<sup>th</sup> April, 2026 through VC mode**

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19.	Representatives of M/s. Shijay Projects India Private Ltd.				
20.	Representatives of M/s. MMPL Pvt. Ltd.				

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21.	Representatives of M/s. Critical Mineral Trackers
22.	Representatives of M/s. Geovale Services Pvt. Ltd.
23.	Representatives of M/s. Hindmetal Exploration Services Pvt. Ltd.
24.	Representatives of M/s. Mining Tech Consultancy Services Pvt. Ltd.
25.	Representatives of M/s. United Exploration India Pvt. Ltd.
26.	Representatives of M/s. GeoExpore Pvt. Ltd.
27.	Representatives of MECL
28.	Representatives of FCI Aravali Gypsum and Minerals India Ltd.
29.	Representatives of M/s. NRD-TATA Steel Ltd.
30.	Representatives of M/s. Gemcokati Exploration Pvt. Ltd.
31.	Representatives of M/s. Ocean Drilling Pvt. Ltd.
32.	Representatives from Geological Survey of India
33.	Representatives from CGM, Gujarat

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