

**Ministry of Mines
National Mineral Exploration Trust**

**Minutes of the 55th Technical-cum-Cost Committee (TCC) meeting held on 27th, 28th,
31st July, 2023 & supplementary meeting on 7th August, 2023 through video conferencing
at New Delhi**

The 55th meeting of Technical-cum-Cost Committee [TCC] of National Mineral Exploration Trust [NMET] was held through video conferencing under the chairmanship of Dr. S. Ravi, Dy. Director General, Geological Survey of India (DDG, GSI) and Chairman, TCC, NMET on 27th, 28th, 31st July, 2023 & supplementary meeting on 7th August, 2023 at New Delhi. Members of TCC-NMET and representatives from MECL, CGM Gujarat, DGM Uttar Pradesh, DGM Arunachal Pradesh, OMC, DGM Madhya Pradesh, DMR Meghalaya, DGM Nagaland, DMG Karnataka, KIOCL, CMPDI, NMDC, DGM Maharashtra, DGM Rajasthan, DMM West Bengal, M/s. Geovale Services Private Limited, M/s. Gemcokati Exploration Pvt. Ltd. and M/s. United Exploration India Pvt. Ltd. have attended the meeting through their respective VC modes.

The list of participants is at **Annexure-1**.

Shri Suresh Chander, Director, GSI and Member Secretary, TCC-NMET, welcomed Dr. S. Ravi, DDG, GSI and Chairman, TCC, NMET, Members of the TCC and participants representing various Notified Exploration Agencies [NEAs] and Notified Private Exploration Agencies [NPEAs]. He briefed about the project proposals submitted by EAs for consideration of 55th TCC meeting. He conveyed that a total of 17 nos. of mineral exploration proposals were submitted by MECL, CGM Gujarat, M/s. Geovale Services Private Limited through CGM Gujarat & DGM Uttar Pradesh, DGM Arunachal Pradesh, OMC, M/s. Gemcokati Exploration Pvt. Ltd. through DGM Madhya Pradesh, and M/s. United Exploration India Pvt. Ltd. through DMM West Bengal. 06 proposals related to financial assistance for procurement submitted the State Meghalaya, Nagaland, Goa and Gujarat. Projects from DGM Maharashtra, CMPDI, DMG Karnataka, OMC, MECL, KIOCL and NMDC have been also submitted for review.

Shri Vivek Kumar Sharma, Director & HoD, requested to submit Utilization certificate from State, NEAs and NPEAs for release of second installment of fund. Further, he informed the committee that field visit for review the ongoing projects of NMET will be conducted by Ministry of Mines.

Dr. S. Ravi, DDG, GSI and Chairman, TCC welcomed the members and other participants from various NEAs/NPEAs. He requested to NEAs/NPEAs for submission of projects related to REE, PGE, critical and strategic mineral instead of bulk minerals.

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

Agenda wise discussions are summarized as follows:

Agenda 55.1: Technical evaluation of new project proposals:



.. 21/08/23



21/08/2023

- f) OMC informed that from the desktop study and field visit they have observed that the airborne magnetic image displays a moderate magnetic response with a feeble East-West linear structure cutting the block. Out of the 100 historic samples 27 samples exhibited gold values for traces to 67.6 g/t. The area bears one drillhole (79.59m) with positive gold values of 0.3 g/t and 0.6 g/t. Gold values of 0.6 and 0.3 g/t have been obtained by fire assay from amphibolite with bands of vein quartz at depth from 58.0 – 59.74m and 72 to 73.5 m respectively. The fire assay results of pitting and trenching shows gold values upto 4.6 g/t gold
- g) GSI communicated that the proposed Salaikena Block, is overlapping with GSI Explored blocks already covered by G-4 stage investigation during FS 1979-80, FS 1980-81 and FS 1981-82. The proposed block, is not overlapping with the GSI blocks taken up during FS 2023-24
- h) Considering the above, TCC opined that ample reconnaissance work has already been carried out in the area. Therefore, to avoid the duplication of work, the committee recommended the project in G3 stage exploration. The outcome of the project will be reviewed after 6 months.

Recommendation of TCC:

The committee recommended the proposal for approval of EC for “ Preliminary Exploration (G3) for Gold in Salaikana Block (3.98 Sq. Km), District: Keonjhar, Odisha” with an estimated cost of ₹ 201.99 lakh (including GST) within time schedule of 12 months for carrying out the proposed work and submission of report as per Annexure 8A & 8B.

Agenda 55.1.15. Reconnaissance survey (G4) for Gold in Dimirimunda Block (44.942 Sq. Km), District- Keonjhar, Odisha. [Implementing Agency: OMC]

- a) The important litho units exposed around the Dimirimunda block include Granite gneiss, Quartz mica schist, Quartz pebble conglomerate, Quartz schist, Quartz veins, Quartz veins and Quaternary Gravel bed.
- b) OMC conveyed that the DoMG, Odisha study included mapping of 1.1 Sq. Km of area in field session of 1975-76 at 1: 2000 scale. The trench samples confirmed the presence of persistent Quartz veins without striking any gold occurrences. However the rock chip samples collected over the area yielded 18.9 gm/tonne. Further, The study by M. A Karim and N. K Sahu from GSI, chemical analyses data revealed that the gold content in the volcanic is quite highly erratic and values range from 50 ppb to 260 ppb.
- c) The proposal has been sent to GSI for their comments. In response to this GSI has informed that The proposed Dimirimunda Block, Keonjhar district, Odisha, proposed by OMC overlapping with GSI Explored blocks already covered by G-4 stage investigation during FS 1980-81, FS 1981-82, FS 1993-94 and FS 1995-96. The proposed block is not overlapping with the GSI blocks taken up during FS 2023-24.

 21/08/23

 21/08/2023

- i) Based on the above, committee opined that the project may be recommended for G3 stage as G4 stage exploration work was already carried out in the area.
- j) The committee also suggested to review the project after 6 months.

Recommendation of TCC:

The committee recommended the proposal for approval of EC for “Preliminary Exploration (G3) for Gold in Dimirimunda Block (5 Sq. Km), District- Keonjhar, Odisha” with an estimated cost of ₹ 201.99 lakh (including GST) within time schedule of 12 months for carrying out the proposed work and submission of report as per Annexure 9A &9B.

Agenda.55.1.16. Reconnaissance survey PGE, Gold and REE in Maneri-Sitapala Block (80 sq. km), Balaghat District: M.P.

[Implementing Agency: DGM, Madhya Pradesh (M/s, Gemcokati Exploration Pvt. Ltd.)]

- a) Geologically the proposed area is marked by the Amgoan Gneissic Complex consisting of Basement gneisses and supracrustals - phyllites and enclaves of metalava, Nandgaon Group represented by Bijli Rhyolites and Khairagarh Group represented by alternating sequence of Sandstones and basalts make up the lithopackage present in the block area.
- b) The Atlas of Geological Potential Areas by GSI marks that the entire Khairagarh volcano-sedimentary sequence as OGP for gol. PGE is also indicated towards the west of the proposed block in the boundary between Amgaonneiss and Bijli Rhyolite.
- c) Stream sediment sampling carried out in the western part of Toposheet no. 64C/11(V.D. Mahajan, 1977), where metagabbro dykes, Bijali rhyolites and tuffs, Pitepanimetabasalt belonging to Dongargarh supergroup are exposed, did not bring out significant basemetal anomalies. However, one sample from stream draining over rhyolite intruded by aplite vein showed anomalous value for copper and two samples from streams originating from a small raised area where metagabbro is exposed showed low anomaly for nickel.
- d) Considering that gabbroic intrusive phases associated with Meso - Proterozoic Volcanics have affinity towards chalcophile elements (Ni, Co, Cu, Cr) and magnetite-bearing gabbro can have significant PGE anomaly upto 1, three (3) magnetite gabbro samples analyzed; the Ni values range from 112ppm to 209ppm (against normal background values of 80 ppm); the Co values range from 73ppm to 148ppm (against normal background values of 25 ppm); V values range from 199ppm to 310ppm (against normal background values of 120 ppm); The totalPGE values ranged from 0.23 to 0.25ppm.



Annexure 1

List of participants attended 55th Technical-cum-cost Committee (TCC) meeting of NMET
Dated: 27th, 28th and 31st July, 2023, Supplementary meeting on 7th August through video
conferencing at New Delhi

S.No.	Name/Designation	Email ID	Contact No	Organization
1	Dr. S. Ravi, Dy. Director General, SU: Karnataka & Goa, GSI Bangalore.	s.ravi1@gsi.gov.in	9441138834	Chairman, TCC
2	Shri Ranjan Kumar Sinha, Controller General (Retd.), IBM	sinhark57@rediffmail.com	9421777637	Member TCC
3	Shri Hemraj Suryavanshi, Addl. Director General (Retd.), GSI	hemrajgsi@gmail.com	7477042176	Member TCC
4	Dr. S.K. Kulshrestha, DDG-RMH-III, NER, GSI, Shillong	s.kulshrestha@gsi.gov.in	9413330658	Member TCC
5	Shri S.K. Adhikari, Chief Mining Geologist, IBM, Nagpur.	skadhikari@ibm.gov.in	7588690545	Member TCC
6	Dr. Anjani Kumar, Dy. General Manager (Exploration) & HoD Planning (Retd.), MECL	anjanikumar1957.ak@gmail.com	9975350576	Member TCC
7	Shri Naeem Ahmed, General Manager (Exploration) (Retd.), CMPDI Ltd.	ahmadnaeem17@yahoo.co.in	8588092153	Member TCC
8	Shri K.L. Mundra, Head-RMRE, AMD, Hyderabad	headrmre.amd@gov.in	9414785663	Member TCC
9	Shri Vivek Kumar Sharma, Director, NMET, Ministry of Mines	vksharma.ofb@gov.in	7024570055	Member Ex-office
10	Shri Vinay Pal, Cost Accounts Officer, GSI, Nagpur	vinay.pal@gsi.gov.in	8527368161	Member TCC
11	Shri P.K. Maharana, AGM (Finance), NALCO, Bhubaneswar	pmaharana@rediffmail.com	8500669500	Member TCC
12	Shri Ravi Kumar Gupta General Manager (Finance) HCL, Kolkata	ravi_g@hindustancopper.com	9433274328	Member TCC
13	Shri. Suresh Chander, Director, GSI, WR, Jaipur.	suresh.chander@gsi.gov.in	9493860963	Member Secretary
14	Shri P.Ravindran, DGM (Exploration)	gm.exploration.@mecl.co.in	7907649392	MECL
15	Shri P.P. Kulkarni DGM (Exploration)	kulkarnip.mecl@gmail.com	8319364061	MECL
16	Shri Naveen Kumar Pala Manager (Geology)	naveenpala.mecl@gmail.com	7738368657	MECL
17	Shri S.K. Satapathy Manager (Geology)	sksatapath4u@gmail.com	9993617090	MECL



21/08/23



21/08/2023

18	MD Dastageer Manager (Geology)	dastageemd@gmail.com	9560739350	MECL
19	Shri Swarup Dhara Manager (Geology)	swarupdhara@gmail.com	8910825696	MECL
20	Shri Syandeep Chakraborty Sr. Geologist	sayanchak2011@gmail.com	9038956935	MECL
21	Dr. Raghwendra Pratap Singh, Senior Manager (Geology)	gmexpl.cmpdi@coalindia.in	9431358716	CMPDI
22	Shri Saurabh Singh, Senior Manager (Geology)	saurabhvns1234@gmail.com	9329026041	CMPDI
23	Dr. Suman Krishna Sit (General Manager Geology)	suman.sit@odishamining.in	7763807475	OMC Ltd
24	Shri Mihir Kumar Malla (Dy General Manager Geology)	mihr.malla@odishamining.in	9777454069	OMC Ltd
25	Shri S.K. Dutta Advisor	advisorbsmc2023@gmail.com biharmines@gmail.com	9430906082 9771405496	DMG, Bihar
26	Dr. Partha Sarathi Jena Manager (Geology)	partha.jena@nmdc.co.in	9701079075	NMDC, Hyderabad
27	Shri Shiva Kumar M (AGM)	bmed@kioclltd.in	9148743807	KIOCL
28	Shri Mohan Raj D (Consultant)	bmed@kioclltd.in	6366774594	KIOCL
29	Shri Tasser Talar, Director	dgmarunachal@gmail.com	8131924291	DGM A.P
30	Dr. R.K. Mrinalinee Devi, Mining Consultant	mrinalineer@reDiffmail.com	8486677967	DGM A.P
31	Biplob Chatterjee (CEO, Director, Consulant)	biplob.chatterjee@geovale.com	9007706145	Geovale Services Private Limited
32	Dr. Joy Gopal Ghosh (Principal, Geology and Exploration)	jjghosh@outlook.com	9999681366	Geovale Services Private Limited
33	Shri Tuasha Majumder (Sr.Project Manager, Geology and Exploration)	tuasha.majumder@geovale.com	9007215397	Geovale Services Private Limited
34	Shri Abhijit Patra (Sr.Projeet Manager, Exploration)	abhijit.patra@geovale.com	8240949535	Geovale Services Private Limited
35	Shri Dinkar S Senior Geologist	ddpmdmg1@gmail.com	9880759019	Department of Mines & Geology Karnataka
36	Shri Udayaravi M P Geologist	ddpmdmg1@gmail.com	9535847039	Department of Mines & Geology Karnataka
37	Dr. A.V. Keshava Prasad, V.P. (Mineral Exploration)	keshava.prasad@gemcokati.com		GemcoKati Exploration Pvt. Ltd.
38	Shri Subrata Sarkar	subrata.sarkar@gemcokati.com	7044208900	GemcoKati Exploration Pvt. Ltd.
39	Representative from DGM Madhya Pradesh	geologydgm@mp.gov.in	--	
40	Representative from DGM Rajasthan	-	-	



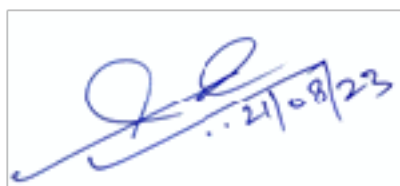

ANNEXURE 9A

Cost Estimated of Preliminary Exploration (G3) for Gold in Dimirimunda Block (5 Sq. Km), District- Keonjhar, Odisha

Name of the Exploration Agency - OMC

Total Area - 5.00 sqkm; Completion Time - 12 Months

S.N	Item of Work	Unit	Rates as per NMET SoC		Estimated Cost of the Proposal		Remark
			SoC-Item -SI No.	Rates as per SoC	Qty.	Total Amount (Rs)	
A	GEOLOGICAL WORK						
1	Geological mapping (1:2000) & sampling						
a	Charges for one Geologist per day at HQ	one Geologist per day	1.3	9,000	40	3,60,000	
b	Charges for one Geologist per day at field (1 Nos)	one Geologist per day	1.3	11,000	150	16,50,000	
c	Labour (2Nos/ geologist)	per Labor day	5.7	494	300	1,48,200	Amount will be reimburse as per the notified rates by the Central Labour Commission or respective State Govt. - whichever is higher
d	Geophysics HQ (Monitoring and interpreting survey data)	one Geophysicst per day	3.19	9,000	0	0	Included in cost of Geophysical Survey, hence not considered
e	Charges for one Sampler per day (1 Party)	one sampler per day	1.5.2	5,100	13	66,300	

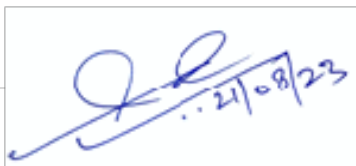



f	Labour (4 Nos/ sampler)	per Labor day	5.7	494	52	25,688	Amount will be reimburse as per the notified rates by the Central Labour Commission or respective State Govt. - whichever is higher
g	Surveyor	one surveyor per day	1.6.1a	8,300	30	2,49,000	
h	DGPS Survey	Per Point of Observation	1.6.2	19,200	10	1,92,000	
2	Trenching						
a	Excavation of Trenches upto 2m depth	per cu m	2.1.1	3,330	40	1,33,200	
	Sub-Total -A					28,24,388	
B	Petrological samples (Surface & Bh Core Samples)						
i	Preparation of standard thin sections	Nos	4.3.1	2,353	10	23,530	
ii	Complete Petrographic/Ore microscopy Study/Mineragraphic	Nos	4.3.4	4,232	5	21,160	
iii	Preparation of unmounted polished section of rock	per sample	4.3.3	1,185	10	11850	
	Sub-Total -B					56,540	
C	Digital Photograph of thin polished section						
i	Digital Photographs	Nos	4.3.7	280	10	2,800	
	Sub-Total -C					2,800	
D	LABORATORY STUDIES						


.. 21/08/23


21/08/2023

1	<u>Chemical Analysis</u>	-	-	-	-	-	BH depth more than 100m has been considered for deviation.
a	Primary Samples for Gold by fire assay (40 BRS+ 20 trench+40 BH core)	Nos	4.1.5a	2,380	70	1,66,600	
b	Check Sample for Gold by fire assay (10% External)	Nos	4.1.5a	2,380	7	16,660	
c	Gold Analysis by AAS method (MIBK method)	per sample	4.1.6	1557	30	46710	
d	Check Sample AAS method	per sample	4.1.6	1557	3	4671	
	Sub-Total -D					2,34,641	
E	Geophysical Survey						
i	Induced Polarization (Dipole-Dipole)	line km	3.4a	69,950	20	13,99,000	
	Sub-Total E					13,99,000	
F	DRILLING (After Review)						
i	Drilling up to 300m (Hard Rock)	m	2.2.1.4a	11,500	1000	1,15,00,000	
	Sub Total F					1,15,00,000	
Total -(A to F)						1,60,17,369	
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 subject to a maximum of Rs. 5 lakh		3,20,347	This amount will be reimburse 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.
H	Geological Report Preparation	5 Hard copies with a soft copy	5.2	For the projects having cost exceeding Rs. 150 lakhs but less than Rs. 300 lakh - A minimum of Rs. 7.5 lakhs or 3% of the value of work whichever is more.		7,50,000	This amount will be reimburse after submission of the final Geological Report in Hard Copies (5 Nos) and the soft copy to NMET by the EA.
I	Peer review Charges		As per EC decision			30,000	
J	Total Estimated Cost without GST					1,71,17,716	
K	Provision for GST @ 18%					30,81,189	GST will be reimbursed as per actual and as per the applicable notified rate
L	Total Estimated Cost with GST					2,01,98,905	
			or Say in Lakhs (Rs.)			201.99	
Note:							
	<p>1. If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 3 of NMET SoC and Item no. 6 of NMET SoC.</p> <p>2. In case of execution of the project by EA on its own, a Certificate regarding non outsourcing of any component/project is required.</p>						

