### Ministry of Mines National Mineral Exploration Trust Minutes of the 76<sup>th</sup> Technical-cum-Cost Committee-1 (TCC-1) meeting held on 30<sup>th</sup>April and 01<sup>st</sup> May, 2025 through video conferencing

The 76<sup>th</sup>meeting of the Technical-cum-Cost Committee-I (TCC-1) of the National Mineral Exploration Trust (NMET) was held via video conferencing under the chairmanship of Dr. S. Ravi, Deputy Director General (DDG), Geological Survey of India Training Institute (GSITI) and Chairman, TCC-1, NMET, on 30<sup>th</sup> April and 1<sup>st</sup> May, 2025.

Members of TCC-1, NMET and representatives from DGM Maharashtra, DMG, Karnataka, DGM Odisha, DGM, Chhattisgarh, GSI, MECL, IBM, CMPDI, OMC Ltd., Maheshwari Mining Pvt Ltd, Ecomen Mining Pvt. Ltd., Mining Tech Consultancy Services Limited (MTCS), Geo Marine Solutions Pvt. Ltd., Bhushilp Mines and Minerals Private Limited, Gemcokati Exploration Pvt Ltd, Kartikay Exploration and Mining Services Pvt. Ltd have attended the meeting through their respective VC modes.

The list of participants is enclosed in Annexure-1.

Shri C. Parthasarathi, Director, GSI and Member Secretary, TCC-1, NMET, welcomed Dr. S. Ravi, DDG, GSI and Chairman, TCC-1, NMET, Members of the TCC-1 and participants representing various Notified Exploration Agencies (NEAs) and Notified Private Exploration Agencies (NPEAs).

Dr. S. Ravi, Chairman of TCC-1, NMET, extended a warm welcome to all members of TCC-1 and participants representing various NEAs and NPEAs and conducted the proceedings as per circulated agenda. While welcoming the participants, the chairman suggested all the agencies to supply adequate technical inputs in the proposal and seek guidance if needed from the NMET. He further advised the official of NMET to assist the agencies whenever sought in preparation of proposals.

### Agenda 76.1: Technical evaluation of new project proposals

### Agenda 76.1.1.Preliminary Exploration (G3) for Manganese in Kawalewada Sakkardara Block, Tumsar Tahsil, Bhandara District, Maharashtra. [Implementing Agency: DGM Maharashtra]

- a) The proposed block falls in Survey of India Toposheet No. 55 O/14 and exposes lithounits of Sausar Belt.
- b) GSI has carried out geological exploration in the area, identifying manganiferous horizons as detached lenticular bands along the contact between biotite gneiss and muscovite schist. Gonditic manganese ore was also observed in trenches and old pits, representing the eastern extension of the ore horizon from the Chikhala MOIL Mine.
- c) MOIL's Chikhala and Sitasaongi deposits lie on the northern range. While past mining occurred east of Chikhala, most of the 5 km ore zone is now inactive. The southern zone was mined near Sakkardara. The manganese ore in the proposed block is the eastern continuation of the Chikla Extension (MOIL) mine, itself an extension of the Chikla 'A' (Main) deposit. The main reef, originally 5–6 m thick, attenuates to about 1 m eastward, while in the proposed block, thickness ranges from 1.5 to 2.5 m. Workable ore mainly comprises secondary oxides, psilomelane and pyrolusite, found as thin, discontinuous lenses within the gondite.

19 les 12015

- d) DGM, Maharastra informed that they conducted traverses along the east-west direction within the specified area and confirmed the association of manganese-bearing gondite with the Mansar Formation, particularly near old pits. Megascopic sample analyses revealed manganese content ranging from 35% to 45%.
- e) During the review, it was noted that Manganese Ore (India) Limited [MOIL] had been operating in the entire area. Therefore, it was considered necessary to verify whether MOIL had previously worked in, or intends to work in, the area. In response, DGM, Maharashtra informed that MOIL has surrendered the area. In light of this, the committee recommended obtaining formal comments from MOIL before making any decision on the matter.

The committee decided to consider the proposal further only after obtaining comments from Manganese Ore India Limited [MOIL]

### Agenda.76.1.2. Preliminary Exploration (G3) for Bauxite/Aluminous Laterite in area of village - Gudheghar, Tahsil - Mandangad, District-Ratnagiri, Maharashtra. [Implementing Agency: DGM, Maharashtra]

- a) The proposed block falls in Survey of India Toposheet No. 47 G/1 and the entire area comprises AA type of lava flows of Deccan traps which are capped by lateritic formation underlain by bauxite with lithomargic clay at the base of laterite profile.
- b) During F.S. 2021–22, the DGM, Maharashtra, completed preliminary exploration in the Ambiwali-Kante block, situated approximately 2 km from the currently proposed area, and estimated bauxite and aluminous laterite resources as per existing norms.
- c) A recent field visit by DGM confirmed the presence of in-situ bauxite within the proposed area.
- d) The proposed area lies in close proximity to existing bauxite operations. The Gundeghar Bauxite Mine is located about 500 meters to the west of the proposed block, while the abandoned Sakhari Velas Bauxite Mine (Smt. S.D. Dhanwate) lies approximately 1 to 1.25 km further west. Both mines have been previously explored by the Geological Survey of India (GSI).
- e) The block lies entirely within GSI's ongoing regional level work over a larger area. However, the committee decided to recommend the proposal, as the Directorate of Geology and Mining (DMG), Maharashtra, has proposed to carry out preliminary exploration in a smaller, focused area.

### Recommendations of TCC-1:

The committee recommended the proposal "Preliminary Exploration (G3) for Bauxite and Aluminous Laterite in Gundheghar Block, Ratnagiri, Maharashtra" for approval of EC with an estimated cost of  $\gtrless$  58.14 lakh (including GST) within time schedule of 10 months for carrying out the proposed work and submission of report as per Annexures - 2A & 2B. The item will be reviewed after 04 and 08 months.

Agenda.76.1.3. Preliminary Exploration (G3) for Limestone in Bhari area, Jiwati Tahsil, Chandrapur District, Maharashtra. [Implementing Agency: DGM, Maharashtra]

a) The proposed Bhari block belongs to Pengang Valley, Penganga Group Limestone and falls in Parts of toposheet no 56 M/2 & 56 M/3

19105/2015

- b) During 1974-76, GSI identified limestone formations in the area with significant potential for cement-grade and blendable-grade limestone and in the Chedvai Limestone Block, a total of 164 million tonnes of cement-grade limestone reserves were estimated.
- c) Further exploration during the 1982-84 field seasons included the drilling of two test boreholes in the Bhari area, which confirmed the presence of both blendable and cement-grade limestone bands.
- d) Recently (2023-25), reconnaissance surveys carried out by the Directorate of Geology and Mining, Regional Office Chandrapur, and supported the mineral potential of the area. Analytical results from collected samples revealed CaO content ranging from 42.19% to 48.32%, MgO from 0.9% to 1.49%, and SiO<sub>2</sub> from 7.67% to 14.66%. In light of these findings and earlier exploration data, the Bhari Limestone Deposit is now proposed for G3 stage exploration.
- e) The committee expressed concern over the fact that part of the proposed area falls within reserved forest, as informed by the agency.
- f) The committee advised to modify the block boundary to exclude the highway on the eastern side. It was further directed that detailed mapping be carried out at 1:4000 scale.
- g) Additionally, the committee advised DGM to provide substantial evidences for proposing borehole in an area covered with alluvium for which the agency responded by saying that, in the adjoining area limestone has been proved below alluvium cover.

The committee recommended the proposal "Preliminary Exploration for Limestone in Bhari Block, Chandrapur district, Maharashtra"for approval of EC with an estimated cost of ₹ 172.94 lakh (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 04 months.

Agenda.76.1.4. Detailed Exploration (G2) for Bauxite/Aluminous Laterite in Byndoor block (2.1037 Sq. Km), Paduvari and Byndoor villages of Byndoor Taluk, Udupi District, Karnataka.

### [Implementing Agency: M/s Ecomen Mining Pvt. Ltd.]

- a) The proposed area belongs to Paduvari Plateau and falls in the Survey of India Toposheet no. 48K/9. The block area comprises alluvium, hard ferruginous laterite, aluminous laterite, and bauxite, with significant portions covered by thick deposits of laterite and, in some areas, alluvium.
- b) Geological Survey of India (GSI) has carried out exploration in the area during FS: 1963-64, reported 38.52% to 53.16% Al<sub>2</sub>O<sub>3</sub> and recommended systematic prospecting of the area to identify sizable patches of aluminous laterite from Byndoor to Bhatkal sector.
- c) Karnataka DMG has carried out preliminary investigation in the area during 1970s but the work lacks precise location data, making correlation with the current block unfeasible. Hence, the area is proposed for reassessment through G-2 stage exploration.
- d) M/S. Ecomen conducted recent field visit and collected bauxite/aluminous laterite samples which yielded 37.07-42.61% Al<sub>2</sub>O<sub>3</sub>. The Old working pits of about 5m depth, which is located in the western part of the proposed block, shows good exposure of Bauxite suggesting potentiality of bauxite mineralization in the area.
- e) The committee had detailed discussion on the appropriate stage of exploration and decided to execute the work in two phases. Phase-I will involve preliminary exploration and then Phase-II will proceed to G2 stage exploration.

1965/2015

The committee recommended the proposal "General Exploration (G2) for Bauxite and Aluminous Laterite in Byndoor Block, Udupi District, Karnataka" for approval of EC with an estimated cost of₹ 225.47 lakh (including GST) within time schedule of 10 months for carrying out the proposed work and submission of report as per Annexure - 4A &4B. The item will be reviewed after 4 and 8 months.

# Agenda.76.1.5. Preliminary Exploration (G3) for Molybdenum in Mannadipatti South Block and Ponnaiyar North Block (total 4.75 sq. km area), Krishnagiri District, Tamil Nadu.

#### [Implementing Agency: MECL]

- a) Mannadipatti South Block and Ponnaiyar North Block form part of the Uttangarai sector of Harur Uttangarai Molybdenum Belt (HUB) located in the southeastern part of Krishnagiri District of Tamil Nadu and falls in the Survey of India Toposheet no. 57L/8.
- b) Reconnaissance exploration for molybdenum was carried out by GSI during Field Seasons 1998–2000 under an MoU with TAMIN (a Tamil Nadu state undertaking) in the Uttangarai sector which comprises several sub-blocks, namely Ponnaiyar North (PN), Mannadipatti South (MNS), Mannadipatti Central (MNC), Mannadipatti North (MNN), and Nochipatti (NP). Exploration has been conducted in different stages in these blocks by GSI.
- c) The Mannadipatti Central Block was kept for auction in the 1st tranche by the Ministry of Mines in 2023–24, but was annulled due to its small size and low resources. The MoM subsequently advised to amalgamate adjoining blocks for future auctions. Accordingly, the Central Block was handed over to GSI, while the South and Ponnaiyar North Blocks were assigned to MECL for further G2 stage exploration and block amalgamation.
- d) MECL informed the committee that Scout boreholes drilled in the Mannadipatti South and Ponnaiyar North sub-blocks of the Uttangarai sector intersected significant molybdenum mineralized zones, indicating strong potential for further exploration.
- e) Based on these developments, MECL has proposed to undertake G3 stage exploration in the Mannadipatti South and Ponnaiyar North Blocks.
- f) After a detailed review, the committee found that the mineralized body's thickness and grade were not very encouraging. However, considering the annulment of earlier blocks due to their small size, the committee decided to recommend the block for G3 stage exploration

### Recommendations of TCC-1:

The committee recommended the proposal "Preliminary exploration (G3) for molybdenum in Mannadipatti South Block & Ponnaiyar North Blocks (4.75 sq.km.), Uttangarai Sector, Harur-Uttangarai Belt, District-Krishnagiri, Tamil Nadu" for approval of EC with an estimated cost of ₹ 799.63 lakh (including GST) within time schedule of 15 months for carrying out the proposed work and submission of report as per Annexure - 5A &5B. The item will be reviewed after 06 and 10 months.



19105/2015

# Agenda.76.1.6. General Exploration (G2) for Graphite and Associated Minerals in Nagapuzha-Vadakhol Block (2.60 sq. km), Ernakulam District, Kerala. [Implementing Agency: MECL]

- a) The Nagapuzha-Vadakhol Block comprises Precambrian metamorphic rocks belonging to the Khondalite-Charnockite Complex and falls in the Survey of India Toposheet no. 58C/9.
- b) GSI reported graphite occurrence in Nagapuzha during 1965-66 and has carried out further work in and around the area and a total of 5,050,938 tonnes with more than 3% F.C. cut off has been estimated in Vadakod area.
- c) The Kalloorkad Graphite Mine, inactive since 2017, has exposed graphite-bearing zones in laterite and kaolinized clay. Field evidence suggests that mineralization extends beyond the lease area, indicating potential for further exploration.
- d) Previous exploration by GSI yielded encouraging results, and the proposed area lies near the Kalloorkad Graphite Mine (M/s Thomson Graphite Mines & Crucible Works), with the graphite band extending to the block.
- e) After thorough review, the committee recommended planning boreholes judiciously, using GSI's level plan to determine the vertical depth of lode intersections. A marker lode should guide borehole placement, and resource estimation should be carried out sector-wise.

### Recommendations of TCC-1:

The committee recommended the proposal "General Exploration (G-2) for Graphite and Associated Minerals in Nagapuzha-Vadakhol Block, District: Ernakulam, Kerala" for approval of EC with an estimated cost of  $\gtrless$  393.08 lakh (including GST) within time schedule of 12 months for carrying out the proposed work and submission of report as per Annexure - 6A 6B. The item will be reviewed after 04 and 08 months.

Agenda.76.1.7. Preliminary Exploration (G3) for Aluminous Laterite, Vanadium and Associated Minerals in Kodom Block (2.00 sq. km), Kasaragod District, Kerala.

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Agenda.76.1.8. Preliminary Exploration (G3) for Aluminous Laterite, Vanadium and Associated Minerals in Kallar Block (4.19 sq. km), Kasaragod District, Kerala.

### [Implementing Agency: MECL]

- a) The proposed blocks, located in Survey of India Toposheet No. 48P/03, comprises mainly charnockites and pyroxene granulites of the Charnockite Group, intruded by younger granite gneiss of the Peninsular Gneissic Complex and numerous quartz veins.
- b) GSI conducted a reconnaissance survey during 1971–72 in parts of Kanhangad and Kasaragod taluks, Cannanore district, Kerala, and reported bauxite occurrences closely associated with laterite. Further investigations in and around the area confirmed the presence of laterite, bauxite, and clay.
- c) Subsequently, MECL carried out exploration (G-4 stage)in the Kasaragod East Block (291.00 sq km; Block-ID: SR-KRL-03) and identified high-alumina bauxite in isolated patches or lenses with irregular distribution. Bedrock samples also showed elevated concentrations of vanadium (up to 1,019.7 ppm), gallium (up to 46.7 ppm), and rare earth elements (REEs).

1965/2015

- d) The proposed Kodom Block, (2.00 sq km) has been carved out from the larger Kasaragod East Block. Three bedrock samples from the area report vanadium (V) concentrations ranging from 355 to 745 ppm, gallium (Ga) between 23 to 37 ppm, and alumina (Al<sub>2</sub>O<sub>3</sub>) content from 22.7% to 27.8%. Additionally, five pit samples reveal Al<sub>2</sub>O<sub>3</sub> values varying between 22.37% and 30.20%.
- e) Similarly, in the proposed Kallar Block, three bedrock and two pit samples showed vanadium values of 407–531.9 ppm, gallium 29.30–32.60 ppm, and alumina content of 26.94–30.64%.
- f) Based on these encouraging results reported by MECL, Kodom and Kallar blocks are proposed for G3 stage investigation.
- g) The committee noted that MECL's G4 map shows patchy laterite distribution with no clear demarcation of mafic/ultramafic rocks. Moreover, satellite imagery indicates dense vegetation. Random bedrock samples showed Al<sub>2</sub>O<sub>3</sub> values of 25.46% (Kodom) and 28.96% (Kallar), indicating aluminous laterite.

The committee did not recommend the proposals due to the lack of systematic data in G4 level and poor lithological clarity. It unjustifiable to recommend G3 exploration at this stage.

### Agenda.76.1.9. Preliminary Exploration (G3) for Limestone in Dongargaon-Kasara Block (5.59 sq. km), Yavatmal District, Maharashtra. [Implementing Agency: MECL]

- a) The Dongargaon-Kasara Limestone Block, falling under Section 10(A)(2)(B) of the MMDR Act, 2015, lies in and around two lapsed limestone leases—M/s Taj Lime Industries (30.70 ha) and Shri Prabin Wamanrao Kasawar (41.00 ha)—in Dongargaon area. MECL has been requested by DGM, Maharashtra, to carry out exploration through NMET. The block is part of the Penganga Beds (Penganga Series) and falls under Survey of India Toposheet No. 56I/13.
- b) M/s Taj Lime Industries and Shri Prabin Wamanrao Kasawar conducted prospecting over 30.70 ha and 41.00 ha, respectively, in the Dongargaon area.
- c) Taj Lime Industries analyzed 5 samples from trial pits, reporting limestone resources of 3.75 MT with CaO: 31.18–57.07%, MgO: 0.77–23.13%, and SiO<sub>2</sub>: 2.82–5.18%.
- d) Kasawar analyzed 4 samples, estimating 4.25 MT of resources with CaO: 32.62– 54.16%, MgO: 0.19–18.58%, and SiO<sub>2</sub>: 0.98-2.09%.
- e) Based on existing data and a field visit, MECL has proposed Preliminary (G-3) Exploration in the Dongargaon-Kasara Block to support the growing limestone demand.
- f) DMG, Maharashtra informed the committee that only 4.05 sq km of the proposed block area is available for exploration.
- g) After detailed review the committee agreed to recommend the proposal to EC for approval.

### Recommendations of TCC-1:

The committee recommended the proposal "Preliminary Exploration (G3) For Limestone In Dongargaon-Kasara Block, District- Yavatmal, Maharashtra" for approval of EC with an estimated cost of ₹ 122.58 lakh (including GST) within time

19105/2015

### schedule of 10months for carrying out the proposed work and submission of report as per Annexure - 7A &7B. The item will be reviewed after 5 months.

#### Agenda 76.1.10.Preliminary Exploration (G3) for Limestone in Dongargaon-Ruikot Block (4.34 sq. km), Yavatmal District, Maharashtra. [Implementing Agency: MECL]

- a) The Dongargaon-Ruikot Limestone Block lies within the two expired limestone lease areas of M/s Taj Lime Industries (30.70 Ha) and Shri Prabin Wamanrao Kasawar (41.00 Ha), granted under Section 10(A)(2)(B) of the MMDR Act, 2015. DGM, Maharashtra, has requested MECL to conduct exploration in these lapsed lease areas (letter no. Tech/1848/2023/260, dated 23/01/2024).
- b) To the north of the proposed block, M/s Taj Lime Industries (30.70 Ha) and Shri Prabin Wamanrao Kasawar (41.00 Ha) have conducted prospecting and identified limestone, with CaO ranging from 31.18% to 57.07% in trial pit samples.
- c) MECL geologists visited the area surrounding the lapsed leases, collected geological data, and identified potential exploration zones. Two samples collected yielded 36.84–38.09% CaO, 13.00–13.13% MgO, and 2.46–3.94% SiO<sub>2</sub>
- d) As DMG, Maharashtra informed that they could not verify the overlapping issue, hence the committee decided to review the item after getting comments from DGM, Maharashtra.

### **Recommendations of TCC-1:**

The committee will review the item after obtaining comments from DGM, Maharashtra.

### Agenda 76.1.11.Preliminary Exploration (G3) for Nickel (Ni), Chromium (Cr) & Rare Metals (RM), Vemula area, YSR (Kadapa) District, Andhra Pradesh. [Implementing Agency: MTCS]

- a) The proposed area falls in SOI toposheet no 57J/7 and it belongs to Lower Cuddapah. The item was given in-principle approval for the item during 74<sup>th</sup>TCC-1 meeting.
- b) The NGCM of GSI indicated copper values of 61-104 ppm in 19 composite samples near Midipenta and Rachigaripalle, along with elevated nickel (14-406 ppm) and chromium (up to 774 ppm) values near Vemula. In addition to these, few good values of V and Sc were also reported.
- c) A G4-level reconnaissance survey (FS 2019–20, FS 2020–21) around Rachigaripalle reported nickel (430 to 1000 ppm in BRS and 88 to 965.8ppm in PCS) and chromium (440 to 800ppm in BRS and 122.1 to 2959.24ppm in PCS) within differentiated gabbro near Vemula.
- d) Previous gravity and magnetic surveys in the area by GSI indicated presence of ferromagnesian minerals in the area.
- e) The item was presented in 74<sup>th</sup> TCC-1 meeting and after detailed review, the committee found the area to be promising for Ni, Cu, and Sc mineralization and advised the agency to conduct a field visit, collect samples from areas not previously explored by GSI, analyze them, and present a DPR with the analytical data.
- f) The committee reviewed the DPR in 76<sup>th</sup> TCC-1 meeting and agreed to recommend the proposal, advising that the drilling component to be fixed judiciously after review of phase-I work.

19 les 12015

The committee recommended the proposal "Preliminay Exploration (G3) for Nickel, Chromium & Rare Metals in Vemula Block, YSR (Kadapa) District, Andhra Pradesh" for approval of EC with an estimated cost of ₹ 480.33 lakh (including GST) within time schedule of 12 months for carrying out the proposed work and submission of report as per Annexure - 8A &8B. The item will be reviewed after 6 and 10 months.

### 76.2 Project Evaluation for In–Principle Approval

#### Agenda 76.2.1.Preliminary Exploration (G3) for limestone in Illuppaiyur block, Ariyalur District, Tamil Nadu [Implementing Agency: Geomarine solutions]

- a) During 1983–89, GSI explored limestone deposits in Ariyalur and Perambalur taluks (erstwhile Tiruchirappalli district), reporting CaO content of 45–55%, indicating cement-grade quality. In 1984–85, GSI reassessed limestone in Ariyalur taluk and estimated 68.3 million tonnes with CaO >45% and MgO <0.1%.</p>
- b) During 1975–88, DGM conducted multi-phase investigations in Ariyalur on behalf of TANCEM, assessing reserves both quantitatively and qualitatively. In 2018–19, GSI carried out G2 stage investigation in Puthuppalayam and Periyathirukonam blocks, estimating 81.3 million tonnes of cement-grade limestone (average CaO 49%), confirming its suitability for cement industries
- c) According to IBM (2019), 75 limestone quarries (both mechanized and nonmechanized) were operational in Ariyalur district. However, many have ceased operations due to factors such as expired licenses and misconceptions about deposit characteristics stemming from inadequate geological inputs.
- d) Based on the available geological records and reports of GSI and DGM, the present proposal for the Illupaiyur block in Ariyalur district aims to assess and explore the hidden resources of industrial-grade limestone in the northeastern part of Ariyalur, Tamil Nadu.
- e) The committee observed that 60% of the proposed block falling outside the limestone band shown in the 50K geological map. However, Geomarine Solutions stated that limestone exposures are present on the eastern side. Additionally, comments from the CGM, Tamil Nadu, on the proposal are still awaited.

### **Recommendations of TCC-1:**

The committee decided to take a final decision on this item after receiving comments from the CGM, Tamil Nadu. However, the committee recommended that Geomarine Solutions may submit the proposal in the forthcoming TCC-1meeting, without seeking in-principle approval at this stage.

## Agenda 76.2.2.Reconnaissance Survey (G4) for Tungsten in Jashpur area, Balod District, Chhattisgarh

### [Implementing Agency: Bhushilp Mines and Minerals Private Limited]

- a) The proposed area forms a part of SOI toposheet no. No. 64N/15.
- b) GSI worked for Tungsten (Scheelite) in parts of Jashpur and Dharamjaygarh Tehsil, Raigarh District, in the year 1989-1990 in parts of Toposheet number 64N/15 and reported sporadic occurrences of tungsten (scheelite) in an area of about 15km length between Lawakera in the east and Dumaria in the west. The

1965/2015

scheelite bearing veins, attaining a maximum thickness of 1m also reported in Junwain. The surface data have given the encouraging results. Scheelite occurs mostly within microcline syenite veins and tourmaline veins.

- c) Based on the previous working, four zones have been identified: a. Junwain area: ten trenches have been excavated, W ranges between 0.01 to 6.65%. b. Dumaria area: Range of  $WO_3$ -0.0040 to 0.0140% c. Kokia Nala (Daltoli) area: 0.1512 to 0.4662%, d. Lawakera Village: W value ranges between 150 ppm-1.08%.
- d) Based on previous data, the G4 stage item has been proposed in Jashpur area.
- e) After a detailed review, the committee noted that the proposed area overlaps with two of GSI's ongoing items; however, the specific commodity being explored by GSI is not clear. Additionally, DGM, Chhattisgarh informed the committee about the possible local issue in the area. Consequently, the committee instructed that clearance is to be obtained from GSI and detailed comments be sought from DGM, Chhattisgarh.

### **Recommendations of TCC-1:**

The committee recommended Bhushilp to resubmit the item again for inprinciple approval.

## Agenda 76.2.3. Preliminary Exploration (G3) for Iron Ore, Gidhali-Chiklakasa block, Balod District, Chhattisgarh

### [Implementing Agency: Bhushilp Mines and Minerals Private Limited]

- a) The proposed area forms a part of SOI toposheet no. No. 64H/2.
- b) GSI conducted a G4 stage survey for iron ore in the Gidhali–Chiklakasa–Putarwahi area, Balod district, Chhattisgarh, identifying eight BIF bands. Among these, two prominent and continuous bands were noted—one near Gidhali (NW–SE) and another near Kokan (NNE–SSW). Of 170 BRS samples analyzed, only 34 showed Fe over 35%, while the rest were below the threshold limit. Silica content was consistently high across all samples, ranging from 19% to 84% SiO<sub>2</sub>.
- c) In the Jhamni–Shikaritola block, 10 out of 14 samples showed Fe (total) content above 30%, with a maximum of 41.78%. In the Konkan iron ore block, 10 samples also recorded Fe (total) values above 30%, with the highest reaching 49.59%.
- d) The committee advised Bhuship to modify the block boundary to avoid the railway line passing through it. The committee also recommended to plan five boreholes, with only one located in the northwest direction. explored by AMD for Uranium and reported with U above the threshold values.

### **Recommendations of TCC-1:**

The committee did not recommend the item for the approval of EC, however suggested BMMPL to prepare and submit a Detailed Project Report (DPR) for one of the two proposed for discussion again.



19105/2025

### 76.3 Technical Evaluation of Procurement Proposals

Agenda 76.3.1. Financial Assistance from NMET funds to procure Machinery Laboratory Equipment/instruments etc. aimed at enhancing the exploration activities (Procurement of Deep Seismic Reflection Survey (DSRS) Equipment for capacity augmentation).

[Implementing Agency: MECL]

- a) Highlighting the importance of role of deep seismic reflection surveying in augmenting the mineral exploration technique, MECL proposed purchasing of 03 DSRS system vibrators along with other peripherals for an estimated amount of Rs. 54.39 crores (Rs. 46.39 crores for imported items + Rs. 8.0 crores for Indian items).
- b) MECL highlighted that this technique is important in revealing hidden structures and potential ore deposits beneath the Earth's crust.
- c) The details of the proposal are as given below: Proposed Budget for DSRS

	A) Imported Items			
S.No	Item Description	Quantit y	Imported items Cost (Rs)	Estimated Cost (Rs)
1	DSRS System Vibrators	3	202564890. 00	202564890.00
2	DSRS Recording System 1500 Channels	1	112960775. 76	112960775.76
3	Insurance Charges		1262102.66	1262102.66
4	Transport Charges		12350000.0 0	12350000.00
5	CIF Value (1 to 4)			329137768.42
6	1% Landing Charges on CIF			3291377.684
7	Customs Duty @ 7.5% on (5+6)			24932185.96
8	IGST Charges @ 18% on (5+6+7)			64325039.77
9	Social Welfare Surcharges @ 10%	42168637.18		
	Total			463855009.02

B) Ind	ian / Local Items			
S.No	Item Description	Quantity	Local items Cost	Estimated Cost
			(Rs)	(Rs)
1	Recording Truck, 5KV, 10 KV	1	31337544.00	31337544.00
	generators, Mesa Software			
2	Processing & Interpretation Software	1	2500000.00	2500000.00
3	CAMC Charges for 2 years After	2	10347792.00	10347792.00
	completion of Warranty			
4	Insurance Charges			125350.17
5	Transport Charges			100000.00
6	Value (1 to 5)		67810686.17	
7	GST 18% on 6			12205923.51
	Total			80016609.68

1965/2015

- d) Upon review TCC-1 enquired and asked MECL to deliberate on the following lines
  - > Organization that is likely to be benefitted or utilize this technique for exploration.
  - > Capital needed for use and maintenance of these instruments.
  - Road map of utilization of DSRS instrument for acquisition of deep seismic data if yes please submit geological domain, mineral system etc.
- e) The Committee concerns on judicial utilization of these instruments, once purchased. Further, the committee was not convinced about the capital needed for use and maintenance of these instruments and opined that the MECL should present more data-based model in terms of ROI (return on investment). MECL should also present the program highlighting the utilization of this survey in initial ten years.

## The TCC-1 recommended MECL to resubmit the proposal by adhering the comments, concerns and substantial actions mentioned above.

## Agenda 76.3.2. Proposal for undertaking Geo-chemical Analysis of Mine samples. [Implementing Agency: IBM]

- a. Consequent to constitution of National Critical Mineral Mission (NCMM) on 29.01.2025 and announcement of Hon'ble Union Finance Minister to bring out a policy for "recovery of critical minerals from tailing" on 01.02.2025, IBM proposed a National Project to create a reliable national level geochemical data base of all the mines and identify possibilities of Critical minerals in mine waste.
- b. IBM proposed to undertake systematic collection of mine dump (including Red mud, Mine overburden, Mine tailings and Metal slag) samples and their chemical analyses.
- c. As per proposal 290 mines and 50 processing plants are targeted, with an average collection of 10 samples from each. As such a target of 3400 samples are set (2900 mines + 500 processing plant samples). A total of 3740 samples (3400 samples+ 340 check samples) to be analysed.
- d. Out of 3740, 400 samples are proposed to be analyzed at IBM and the rest will be out sourced.

S. No.	Target Sites	No. of Samples to be generated
1	Mines	2900
2	Processing Plants	500
	Sub total	3400
3	Check Samples (10%)	340
4	Total Samples	~ 3740
5	Sample proposed to be analyzed at IBM	400
6	Proposed to be outsourced (required financial assistance)	3340

e. The details of proposal are as follows:

1965/2015

f. The committee instructed that all samples must by analyzed under similar specifications. The analysis should be done by labs following similar standards for any particular method. The committee also suggested that analysis should be done in discussion with IIT-ISM, Dhanbad, which is planning to carry similar studies.

### Recommendation TCC

The TCC-I recommended financial assistance of Rs. 1280.49 lakhs (Rupees Twelve crore Eighty Lakhs Forty Nine Thousand) from NMET for analysis of 3340 samples as given at Annexure 10A & 10B.

Agenda 76.3.3. Proposal for requirement gathering cum preparation of SRS Design, development and deployment of Next Generation Portal (Portal-NG) of GSI, migration of legacy data of OCBIS Portal

### [Implementing Agency: GSI]

- a) GSI informed that the Online Core Business Integrated System (OCBIS) has been in operation since Field Season (FS) 2016-17. with M/s Accenture Solutions Pvt. Ltd as the Implementation Agency (IA) for Development, implementation, Operation and Maintenance (O&M) of OCBIS business modules. The (O&M) phase of M/s Accenture Solutions Pvt. Ltd. as IA was first extended up to 28.02.2026 with the condition for GSI to develop Next Generation Portal (Portal-NG) by Bhaskaracharya National Institute for Space Applications and Geo-informatics (BISAG-N).
- b) In accordance to the same, GSI presented their proposal to engage Bhaskaracharya National Institute for Space Applications and Geo informatics (BISAG-N) as System Integrator (SI) and Implementation Agency (IA) for preparation of SRS document and development of Portal-NG of GSI as well as O&M for 3 years after Go-Live.
- c) GSI informed that OCBIS has provided GSI the firm platform for furthering its organizational IT enablement process. However, a lot of technological development has taken place in recent years. The National Geospatial Data Repository (NGDR) has already been developed by BISAG-N and is being administered by GSI. Furthermore, lot of application like eHRMS, SPARROW, CPGRAMS, RTI online, PFMS etc. have been developed by NIC, which have been adopted by various Ministries and Central Government Departments. Hence, GSI wants to adopt the next level of high-end IT tools and practices including data analytics as followed by global geological survey organizations.
- d) GSI apprised that the Next Generation GSI portal will be essentially a FSPMIS based system with other supporting applications like Laboratory Management System (LMS), Drilling Management System (DMS), Vehicle Management System (VMS), etc.

19/05/2025

- e) In view of the above, GSI proposed approval of NMET for preparation of SRS document, Design, development and deployment of Next Generation Portal (Portal-NG) of GSI. GSI informed that this project includes migration of legacy data of OCBIS Portal, Go-Live of Portal-NG in one year and Operation and maintenance (O&M) of Portal-NG for next 3 years after Go-Live" by BISAG-N with timeline for development and complete migration of data is decided to be done by 31st May 2026.
- f) GSI informed that approval was received from Ministry of Mines in this regard vide letter dated 08.04.2025. Further, GSI presented their timeline and costing for the proposed procurement as given below:

Milestone	Activities	Timeline	Milestone-wise Cost (Exclusive of GST)	Payment mode
M1	<ol> <li>Detailed Study, requirement gathering &amp; Documentation</li> <li>Designing of various modules and preparation of SRS document</li> </ol>	T0+ 3 Month	₹ 2 Crore	After completion of Milestone
M2	Development of applications And Technical Infrastructure	T0+ Till	T0+ Till	
МЗ	Migration of Legacy Data	28/02/2026	₹20.94Crore*+ 5Crore(Technical	After completion of these
M4	Testing and Go-live	(Go-live date)	Infra#)	Milestones (M2-M5)
M5	Testing post Go-live and Development of remaining Applications/modules	T0+12Months @		
M6 (Y1toY4)	Cloud Infrastructure	T0+48months (1 year development phase till 31/05/2026+3 Years O&M)	Estimated Cost ₹ 8 Crore/year=₹32 Crore (or will be charged as per actual)	At the beginning of each year from T0 (Y1to Y4)



2000 19/05/2015

M7(Q1to Q12)	Adaptive changes/ Change management	T13+36 Months	₹1.8Crore(Estima ted, however will be charged as per actual)	After completion of each changes	
M8(Q1to Q12)	Maintenance and Support (3Years)	T13 +36 Mo nths	₹4.08 Crore*3 = ₹ 12.24Crore	Quarterly after M5	
M9(Q1to Q12)	Help Desk (3Years)	T13+36Months	₹1.08 Crore*3 = ₹ 3.24 Crore	Quarterly after M5	
M10(Q1to Q16)	Travelling & Accommodation (4Years)	T0+ 48Months	<b>₹</b> 4 Crore	Quarterly from T0	
(Q1to Q16)	Maintenance of devices being used at Data Center (DC) at Dharitri building	T0 + 48 Months	₹ 10 Lakh * 4 = 40 Lakh	At the beginning of each year from T0 (Y1 to Y4)	
Total Cost			₹ 81.62 Crores (Exclusive of GST)		
			Tax as on 10/11/2024 is 18%		
			₹ 81.62 Crore + 18% = ₹ 96.31 Crore		

If, T0 may be considered from 01/06/2025,

Then, first year (Y1) may be considered from 01/06/2025 to 31/05/2026; 2nd year (Y2) may be considered from 01/06/2026 to 31/05/2027; 3rd year (Y3) may be considered from 01/06/2027 to 31/05/2028; 4th year (Y4) may be considered from 01/06/2028 to 31/05/2029

# Technical Infra includes the hardware (Laptop/Desktops, Mobile Devices, Tab) to be procured for the development.

After Go-live, the quarter from 1<sup>st</sup> March, 2026 to 31<sup>st</sup> May, 2026, BISAG-N will also carry out adaptive changes, trouble-shooting related to Portal-NG and O & M.

19105/2015

g. The TCC-1 opined that establishment of Portal-NG will enable GSI in efficient monitoring of its exploration activities and formulating quality programmes of Mineral exploration particularly for Critical Minerals. The committee also suggested to omit the module which may already exist in NGDR portal. In view of the same the committee agreed to recommend the proposal for approval of EC.

### **Recommendations of TCC-1:**

The TCC-1 recommended the proposal to EC for "Requirement gathering cum preparation of SRS, Design, development and deployment of the Next Generation Portal (Portal-NG), migration of legacy data of OCBIS portal, Go-Live for Portal-NG and O & M of Portal NG "at a total cost of ₹ 96.31 Crores only (including applicable taxes) with timeline of 4 years, i.e. 01 year for development (from 1st June 2025 to 31st May 2026) + 03 years of O&M of portal-NG (from 1st June 2026 to 31st May 2029)

### 76.4 Review of Ongoing Procurement Project & Timeline Extension

#### Agenda 76.4.1.Financial Assistance from NMET funds to procure Machinery Laboratory Equipment/instruments etc. aimed at enhancing the exploration activities [Implementing Agency: DMG Karnataka]

DMG Karnataka did not present the item

### Agenda 76.4.2.Multi-sensor aero-geophysical surveys over blocks 7 & 9 (extension of project contract timeline of NAGMP Blocks 7 & 9) [Implementing Agency: GSI]

- a) RSAS, GSI, Bengaluru, informed the committee that the Block-9 project was approved during the 14th EC Meeting held on 9th November 2019, with an approved cost of INR 2,35,37,487/-. Additionally, the Block-7 project received approval in the 31<sup>st</sup> EC Meeting held on 12th September 2023, with approved cost of INR 35,74,52,623/-.
- b) Furthermore, Secretary, Mines & Chairperson, EC approved the timeline extension over Obvious Geological, Potential (OGP) Block 7 & Block 9 upto 30<sup>th</sup> June 2025 and accordingly, OM was issued on 17.08.2023.
- c) A consortium of M/s Xcalibur McPhar Private Limited (formerly known as M/s McPhar International Private Limited) in consortium with M/s Xcalibur Aviation (Australia) Pty Ltd, subsidiary company of Xcalibur Multiphysics Group S.L., Spain and M/s Geovale Services Pvt. Ltd., India was awarded Project Implementing NAGMP Blocks 7 & 9 MoA was signed on 11.08.2023 for Block-7 and 03.08.2023 for Block-9 with contract validity of both NAGMP blocks till 31.03.2025.
- d) The PIA has assured to complete the data acquisition over Block 7 & 9 by May, 2026 in eleven months. Further, seven additional months are required to complete the data processing, compilation, interpretation, integration & submission of final deliverables and three more months for reviewing & acceptance by GSI.

19/05/2015

e) In view of the above, The PIA, M/s. Xcalibur McPhar Private Limited of NAGMP Blocks-7 & 9 had submitted a letter to RSAS, GSI on 01.04.2025 and 09.04.2025 with request for the extension of contract timeline for 21 months from 01.07.2025 to 31.03.2027. and the detailed break up of timelines for completion of the project are furnished as below:

Detail of the work	Timelines	Justification
Mobilization and completion of data acquisition & demobilization of aircrafts	11 Months (July, 2025 to May, 2026)	
Data Processing, compilation, final processing, integration & interpretation and submission of final deliverables and final reports.	completion of data acquisition (June, 2026	M/s Xcalibur intend to commence the data acquisition in October 2025 and complete all phases of the project as per the
Reviewing and approval of all final deliverables and report by GSI	2 Months (January, 2027 February, 2027)	timeline mentioned.
Final review and acceptance by GSI	1 month (March, 2027)	

### Recommendation TCC -1

The TCC-1 recommended for extension of project timeline of Multi-Sensor Aerogeophysical Survey over Obvious Geological Potential OGP) Block 7 & 9 from 01.07.2025 to 31.03.2027 i.e. 21 months with effect from the issue of the Extension order without any financial impact for the successful completion of the aerogeophysical survey project by the PIA of NAGMP Blocks 7 & 9.

### 76.5 Review of Ongoing Projects/ Completed Project & Timeline Extension

### Agenda 76.5.1.Preliminary Survey (G3) for graphite in Lamer-Panga Block-A (13.99 sq. Km) in Kalahandi district of Odisha. [Implementing Agency: OMC]

- a. OMC informed that the project was approved in the 27<sup>th</sup> EC Meeting held on 10<sup>th</sup> January, 2023. The sanction order was issued on 3<sup>rd</sup> February, 2023 with timeline of 16 months and approved cost was INR 2,32,65,315/-.
- b. TCC-1was informed that time extension upto 31<sup>st</sup> March, 2025 was approved in 73<sup>rd</sup> TCC-1 Meeting held on 30<sup>th</sup> January, 2025 for final submission of Geological Report.
- c. OMC informed that the GR has been peer reviewed and all the recommendations/suggestions have been complied with a total of 3098039 tonnes or 3.098 million tonnes with an average 6.67 % FC of Inferred mineral resource (333) of graphite has been estimated by Cross Sectional Area method.
- d. OMC requested for final submission of GR and an extension upto 15<sup>th</sup> May 2025 was sought for the same.

19/05/2015

e. However, the committee was not satisfied with the completed work. The BH plans and LV sections were found to be unsatisfactory and hence showed their apprehension about the calculated resource. The committee instructed that all the comments received in peer review should be attended properly.

### **Recommendations of TCC-1:**

The TCC-1 recommended 02 months' extension, upto 31.05.2025 for final GR submission after incorporation of comments of TCC-1 and peer reviewer's comment.

## Agenda 76.5.2.Preliminary exploration (G3) for Gold in Dimirimunda Block (5 Sq. Km), District: Keonjhar, Odisha.

- [Implementing Agency: OMC]
  - a) OMC informed that the project was approved in the 31<sup>st</sup> EC Meeting held on 12<sup>th</sup> September, 2023. The sanction order was issued on 05<sup>th</sup> October, 2023 with timeline of 12 months and approved cost was INR 2,01,98,905/-.
  - b) OMC apprised that time extension upto 31<sup>st</sup> March, 2025 was approved in 73<sup>rd</sup> TCC Meeting held on 30<sup>th</sup> January, 2025 for final submission of Geological Report.
  - c) OMC informed that the Geological Report (G-3) is prepared, Peer reviewed, modified as per scrutiny. The amount approved in the revised cost sheet is completely utilized.OMC requested for 1.5 months' time extension for submission of GR
  - d) The committee agreed for GR submission by 15<sup>th</sup> May 2025.

### **Recommendations of TCC-1:**

The TCC-1 recommended for 1.5 months of time extension upto 15<sup>th</sup> May, 2025 for final GR submission to NMET.

### Agenda 76.5.3.Preliminary exploration (G3) for Iron ore in Madhyapur Block (6.5 Sq.Km), District: Keonjhar, Odisha. [Implementing Agency: OMC]

- a) OMC informed that the project was approved in the 32<sup>nd</sup> EC Meeting held on 06<sup>th</sup> December, 2023. The sanction order was issued on 15<sup>th</sup> December, 2023 with timeline of 12 months and approved cost was INR 1,97,07,639/-.
- b) OMC informed that time extension upto 30<sup>th</sup> April 2025 was approved in 73<sup>rd</sup> TCC Meeting held on 30<sup>th</sup> January, 2025 for final submission of Geological Report.
- c) OMC apprised that Geological mapping in the Madhyapur block was carried out on 1:4000 scale covering 6.5 sq. km of area. OMC informed that as per field observations and data integration studies involving Geology, Geophysics and Geochemistry, the study area was found to be of barren w.r.t. Iron Ore mineralization.
- d) OMC also informed that GR is peer reviewed. Modifications as per reviewer's comments attended and is ready for submission.
- e) In view of above the committee agreed for time extension upto 15 May 2025 for submission of GR

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## The TCC-1 recommended 15 days of extension upto 15<sup>th</sup> May, 2025 for GR submission. The cost of the project revised from 197 lakh to 22.14 lakh (Annexure 9)

#### Agenda 76.5.4.Reconnaissance survey (G4) for Manganese around Kandhal area of Rairakhol Tahasil of Sambalpur District, Odisha. [Implementing Agency: DMG, Odisha]

- a) DMG Odisha informed that the project was approved in the 38<sup>th</sup> EC Meeting held on 29<sup>th</sup> November, 2024. The sanction order was issued on 13<sup>th</sup> December, 2024 with timeline of 10 months (up to 12.10.2025) and approved cost was INR 73,94,658/-.
- b) DMG Odisha presented the progress of work and informed that Mn content in the analysed samples is very good, but the main issue is continuity of band.
- c) DMG Odisha informed that forest clearance is under progress and will be available soon. DMG Odisha, however, informed that for drilling approachable road needs to be constructed, while the quantum of drilling component is only 200 m. DMG Odisha requested to drop the drilling component and add geophysical studies in the work component.
- d) The Committee opined, that if drilling is to be dropped, then pitting and trenching quantum to be increased to trace the Manganese band.
- e) Upon review, the TCC-1 felt, as the project period is still on, DMG, Odisha has been advised to explore the possibility for accomplishing drilling target.

### Recommendations of TCC-1:

## The TCC-1 recommended that quantum of pitting and trenching along with BRS analyses to be completed first. The project will be next reviewed in August, 2025.

### Agenda 76.5.5. Preliminary Exploration (G3) for Limestone in Malkhed-1 North, Malkhed-1 South, Malkhed-2 North and Malkhed-2 South Blocks (over an extent of 18.02 sq. km), Gulbarga District, Karnataka

### [Implementing Agency: MECL]

- a) MECL informed that the project was approved in the 37<sup>th</sup> EC Meeting held on 23<sup>rd</sup> September, 2024. The sanction order was issued on 22<sup>nd</sup> October, 2024 with timeline of 06 months (up to 21.04.2025) and approved cost was INR 1,21,84,885/-.
- b) MECL informed that drilling commenced on 06.02.2025 and completed on 03.04.2025. The report work is under progress and Sought extension upto 30.06.2025 for GR submission after Peer Review.
- c) The Committee agreed for Peer Review of the GR and timeline upto 30<sup>th</sup> June 2025.

### **Recommendations of TCC-1:**

The TCC-1approved 2.5 months extension upto 30th June 2025 for GR submission.

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### Agenda 76.5.6.Preliminary Exploration (G3) (Phase-1) for Gold in Kudrekonda Area (by Geophysical Survey, Devangere District, Karnataka [Implementing Agency: MECL]

- a) MECL informed that the project was approved in the 33<sup>rd</sup> EC Meeting held on 19<sup>th</sup>February, 2024. The sanction order was issued on 27<sup>th</sup>February, 2024 with timeline of 12 months (up to 26.02.2025) and approved cost was INR 2,44,68,583 /-.
- b) MECL informed that Geological mapping (1:2000 scale) over 2.74 sq.km. & surface sampling work (30BR) were completed on 15<sup>th</sup> Aug, 2024. Ground Geophysical survey work comprising of Electromagnetic survey (TDEM), 360 soundings and MT survey on 36 stations has been completed. However, Deep I.P. Survey (30 Lkm) could not be initiated due to strong objections raised by local people.
- c) MECL apprised that given the prevailing hostility and the potential risk to personnel safety, the Assistant Commissioner, Tahsildar, and Senior Geologist (DMG Karnataka) have advised MECL to surrender the block, citing the possibility of lifethreatening incidents during further fieldwork.
- d) MECL informed that under present circumstances, no further work can be carried out and at present, MECL suspends further investigation in the area.
- e) MECL requested for extension of timeline for submission of report by 26<sup>th</sup> June, 2025.
- f) The TCC-1 noted the limitations in the project and agreed for closure of the project after submission of GR. The Committee also asked to submit the revised cost sheet during the final review of the project

### **Recommendations of TCC-1:**

The TCC-1 agreed for closure of the project, revise the cost sheet and submit the GR. The committee also recommended 1 month time line extension upto 25.06.2025 granted.

Agenda 76.5.7.Reconnaissance Survey (G4) for coal in West of Ghugus & Bellora, Wardha Valley, Coalfield, Yavatmal, Maharashtra.

### [Implementing Agency: CMPDI]

- a) CMPDI informed that the project was approved in the 27<sup>th</sup> EC Meeting held on 10<sup>th</sup> January, 2023. The sanction order was issued on 3<sup>rd</sup> February, 2023 with timeline of 12 months and approved cost was INR 2,15,76,661/-.
- b) The project was reviewed in 75<sup>th</sup> meeting of TCC-1 and the committee suggested for pre-closure of the project and time extension up to 30th April 2025 for GR submission citing the unavailability of FC and local issue for drilling.
- c) CMPDI apprised that GR has been peer reviewed and the comments had been complied with. CMPDI sought approval of committee for final submission of GR.

### Recommendations of TCC-1:

The TCC-1 agreed for final submission of GR.

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### Agenda 76.5.8.Preliminary exploration (G3) for Limestone in Rupapeth Block, Chandrapur district, Maharashtra

### [Implementing Agency: Gemcokati]

- a) Gemcokati informed that the project was approved in the 35<sup>th</sup> EC Meeting held on 16<sup>th</sup> May, 2024. The sanction order was issued on 10<sup>th</sup> June, 2024 with timeline of 10 months (up to 09.04.2025) and approved cost was INR 95,99,632/-.
- b) Gemcokati informed that the GR is peer reviewed and reviewer's comments have been attended.

### **Recommendations of TCC-1:**

### The committee agreed for GR submission by 30th June, 2025.

### Agenda 76.5.9.Reconnaissance Survey (G4) for Iron Ore in Arewada –Hitapadi Block (27 sq km), District: Gadchiroli, Maharashtra

### [Implementing Agency: Gemcokati]

- a) Gemcokati informed that the project was approved in the 38<sup>th</sup> EC Meeting held on 29<sup>th</sup> November, 2024. The sanction order was issued on 6<sup>th</sup> January, 2025 with timeline of 06 months (up to 05.07.2025) and approved cost was INR 16,57,688/-.
- b) Gemcokati apprised the house that all the approved quantum targets have been achieved. Mineralized zone in the form of Banded Magnetite Quartzite (BMQ) & Banded Hematite Quartzite (BHQ) having 4km strike length and 6m to 16m width have been delineated on the surface. Iron ore content varies from about 8% to 48% in BRS samples and 25% to 47% in channel samples. An area of 3.8 Sq. km has been proposed for CL block.
- c) Gemcokati requested for submission of report and nomination for peer reviewer.
- d) The Committee was not satisfied with the mapping done and hence suggested to produce quality map. The committee instructed to present the geological map as per the modifications suggested and bring for review in next TCC.

### **Recommendations of TCC-1:**

## The TCC-1 suggested that quality of map may be improved and presented in upcoming 77<sup>th</sup> TCC-I.

### Agenda 76.5.10.Preliminary Exploration (G3) for Limestone in Sawalhira (East) Block, Chandrapur District, Maharashtra

### [Implementing Agency: Gemcokati]

- a) Gemcokati informed that the project was approved in the 35<sup>th</sup> EC Meeting held on 16<sup>th</sup> May, 2024. The sanction order was issued on 10<sup>th</sup> June, 2024 with timeline of 10 months (up to 09.04.2025) and approved cost was INR 86,70,545/-.
- b) Gemcokati apprised the house, that all the work quantum except for drilling and drill core analysis have been achieved. Due to delay in forest clearance, drilling of the remaining 3 BH (180 m) could not be completed. A total of 54 samples (45 nos. BRS + 3 Check + 6 Pit samples) are analyzed for six radicals against assigned quantum of 33 samples.
- c) Gemcokati apprised the house that BRS and Pit samples (1meter depth) results are providing relatively good CaO values and hence requested for 1meter length of sampling instead of 1.5 m thickness sampling. This will cause an additional analysis

19105/2015

of 60 core samples (for remaining 180 m drilling) with additional cost of Rs, 2,77,200/- (Rs. Two lakh seventy seven thousand two hundred only).

- d) The tem was reviewed in 73rd TCC-1 meeting. The map prepared is not proper and concept of geological mapping should be understood thoroughly.
- e) Analytical results of BRS and Core Samples shown is not supporting the presence of limestone in the block.
- f) Gemcokati has to improve the map and properly elucidate the rock types and plan further work judiciously.

### **Recommendations of TCC-1:**

## The TCC-1suggested that quality of map may be improved and presented in upcoming 77<sup>th</sup> TCC-I.

#### Agenda 76.5.11. Reconnaissance Survey (G4) for Graphite in Darukona Area, Rayagada, Odisha. [Implementing Agency: MMPL]

- a) MMPL informed that the project was approved in the 32<sup>nd</sup> EC Meeting held on 06<sup>th</sup> December, 2023. The sanction order was issued on 15<sup>th</sup> December, 2023 with timeline of 12 months and approved cost was INR 1,73,81,649/-.
- b) MMPL informed 39th EC of NMET had approved 3.5 months' time extension upto 31st March 2025 and 2 months extension recommended in 75<sup>th</sup> TCC-I upto 31.05.2025. MMPL apprised that that exploration work has been completed in the block. Out 3 BHs drilled, 3 zones were delineated and the resources were calculated as given below:

Graphite Zone	Borehole Number	Band	Depth		Thickness (m)	Average Fc%	Band Wise resource	Resource Of Graphite At 2% Conditional Cut Off
			From	То				(Million Tonne)
	Grooveline G-11	B-7			7.0	6.42	0.021	
Z-A	DDBH-2	B-2	26.00	28.00	2.0	2.67	0.006	0.06
	Grooveline	B-4			5.0	4.66	0.023	
	G-12	B-5			2.0	2.65	0.012	
	DSBH-2	B-9	16.65	22.88	6.1	3.55	0.004	
Z-B	Grooveline G-7	B-11			7.8	6.90	0.009	0.03
	Trench	B-12			12.6	9.08	0.015	
Z-C	DSBH-3	B-13	34.00	42.68	8.4	3.61	0.050	0.08
2-0	D2RH-3	B-14	129.19	132.5	2.23	3.52	0.030	0.00

c) MMPL informed that the values of tungsten are encouraging for the 95% of the total 144 samples analyzed from the zones A, B and C. But as the sampling of the cores

1965/2015

was done focusing the graphite mineralization. Therefore, a data gap is there for the wider parting area between the graphite bands. The area needs further systematic sampling to assess the potentiality of tungsten mineralization in the area. Therefore, MMPL proposes to upgrade the investigation in G-3 stage with special reference to tungsten mineralization of the area.

- d) The committee suggested that the potential bands for Graphite (in borehole DDBH-1) can be delineated with systematic sampling and delineated further through more sampling if needed.
- e) In view of the above, committee asked MMPL to have 2-3 samples checked from another lab to confirm the values of tungsten and submit the GR by 30<sup>th</sup> June 2025

### Recommendations of TCC-1:

The TCC-1 recommended 1 month timelines extension upto 30<sup>th</sup> June 2025 for GR submission to EC and advised MMPL to check 2-3 samples in another lab to confirm the values of tungsten.

#### Agenda 76.5.12.Reconnaissance Survey (G4) for Graphite in Kanapulisi Area, Rayagada, Odisha. [Implementing Agency: MMPL]

- a) MMPL informed that the project was approved in the 32<sup>nd</sup> EC Meeting held on 06th December, 2023. The sanction order was issued on 15<sup>th</sup> December, 2023 with timeline of 12 months and approved cost was INR 1,69,49,726/-.
- b) MMPL informed 39<sup>th</sup> EC of NMET had approved 3.5 months' time extension upto 31<sup>st</sup> March 2025 and 2 months extension recommended in 75<sup>th</sup> TCC-I upto 31.05.2025. MMPL said that exploration work has been completed in the block. Out of 8 BHs drilled, 2 zones were delineated and the resources were calculated as given below:

Graphite Zone	Borehole Number	Band	Average Fc%	True Thickness (m)	Depth		Band Wise Resource	Cumulativ e Resource Of Graphite At 2% Cut
					From	То		Off (Million Tonne)
	KKBH-1	B-3	4.44	2.52	15.17	18.08	0.005	
		B-6	2.94	4.71	52.07	57.14	0.011	
	Grooveline G-6	B-5	5.67	5.27			0.012	
Z-A	KKBH-2	B-3	3.46	5.25	35.36	41.42	0.017	0.12
	Groove line G-7	B-3	10.21	3.54			0.008	0.12
	KKBH-3	B-3	4.26	5.98	47.8	54.7	0.032	
	Grooveline G-12	B-3	4.66	5.85			0.035	

2 mi 1965/2025

	KTBH-1	B-7	6.1	2.14	60	62.8	0.013	
Z-B	Grooveline G-3	B-7	9.99	2.4			0.012	0.06
2-D	Grooveline G-11	B-7	8.27	3.48			0.020	0.06
	KTBH-3	B-1	3.57	3.4	52.16	56.6	0.018	

- c) MMPL apprised that it has been noticed that the values of tungsten are encouraging for 85% of the total 150 samples analyzed from the zones A & B. But as the sampling of the cores was done focusing the graphite mineralization. Therefore, a data gap has been created for the wider parting area between the graphite band. The area needs further systematic sampling to assess the potentiality of tungsten mineralization in the area.
- d) MMPL requested for 3 months time extension upto 30 June 2025.
- e) The committee found borehole samples from KKBH-1 to be unpromising for graphite. However, if the samples show favorable indications for tungsten (W), further exploration may be considered. It must also be ensured that sample processing is free from tungsten carbide contamination
- f) In view of the above, committee asked MMPL to have 2-3 samples checked from another lab to confirm the values of tungsten and submit the GR by 30th June 2025.

The TCC-1recommended 1 month timelines extension upto 30<sup>th</sup> June 2025 for GR submission to EC and advised MMPL to check 2-3 samples in another lab to confirm the values.

### Agenda 76.5.13. Preliminary Exploration (G3) for Limestone in Mangrur Block, Adilabad, Telangana. [Implementing Agency: MMPL]

- a) MMPL informed that the project was approved in the 39th EC Meeting held on 24th January, 2025. The sanction order was issued on 07th March, 2025 with timeline of 08 months (up to 09.10.2025) and approved cost was INR 69,73,540/-.
- b) MMPL informed that geological mapping, BRS sampling, and a DGPS survey has been completed in the block. During a recent visit for the regular inspection and review of the block, the Geologist of the GSI State Unit, Telangana, pointed out that GSI had previously explored for coal in the western part of the approved block in FS: 2015-2016.
- c) MMPL informed that before submitting the DPR for approval, MMPL consulted all available data geological mapping reports GSI, however, the coal block report was not found during this initial study for consideration.
- d) Considering the above. MMPL requested approval of modification of the block boundaries as given below. The block area is being reduced from 2.51 sq.km to 1.40 sq.km.



1965/2025



e) In view of above, the TCC-1 agreed for revision of area to 1.40 sq.km.

The committee recommended revising the block area from 2.51 sq.km to 1.40 sq.km by excluding the portion already explored by GSI for coal, for consideration and approval of EC. The committee also advised MMPL to check with NMET the comments of SU: Telangana provided at the time of proposal.

### Agenda 76.5.14.Preliminary Exploration (G3) for Copper and associated Mineralization in Govindpur Block (0.83 sq.km.), Chandrapur District, Maharashtra.

### [Implementing Agency: Kartikay Exploration and Mining Services Pvt. Ltd.]

- a. Kartikay Exploration and Mining Services Pvt. Ltd. informed that the project was recommended in the 65<sup>th</sup> TCC Meeting held on 28<sup>th</sup>, 29<sup>th</sup> and 31<sup>st</sup> May, 2024. The OM was issued on 21<sup>st</sup> August, 2024 with timeline of 08 months (up to 20.04.2025) and approved cost was INR 1,26,07,813/-.
- b. The agency apprised the committee that Geophysical survey has been completed.
- c. Mapping and other component is partially completed as permission from Forest Department is not yet received. The work was also delayed due to standing crops as locals did not allow to enter the agricultural field area. The agency sought extension of timeline by 4 months for GR submission.
- d. The committee stated that the area is not encouraging overall, as analytical results from BRS and trench samples indicate maximum copper (Cu) values of around 200 ppm. However, the zone exhibiting the strongest chargeability anomaly may be tested with a one inclined borehole, drilled at a 50–55° angle to a vertical depth of 50–60 meters, with a southwesterly bearing.

### **Recommendations of TCC-1:**

*The TCC-1 suggested to present cross-section in next TCC and approved extension of 3 months upto 20<sup>th</sup>July 2025.* 



965/2015

### Agenda 76.5.15.Preliminary Exploration (G3) for Aluminous Laterite and associated Critical Elements (V, Ga, & REE) in Mundalli Block, Uttara Kannada District, Karnataka

### [Implementing Agency: Geo Marine Solutions Pvt. Ltd.]

- a. Geo Marine Solutions Pvt. Ltd. informed that the project was approved in the 38<sup>th</sup> EC Meeting held on 23.12.2024. The sanction order was issued on 30<sup>th</sup> December, 2024 with timeline of 10 months (up to 29.10.2025) and approved cost was INR 90,92,156/-
- b. The agency apprised the committee that geological mapping has been completed. Besides, 127 m out of approved 200 m of drilling component is also completed. Geo Marine Solutions submitted that additional drilling of 16 BH (400\*400 m grid) with average depth of 20 m (total 320 m) and additional 360 core samples may be approved. They also request for dropping pitting component from quantum.
- c. The committee opined that the approved targets including pitting should be completed first and based on the outcome additional targets may be considered. Infilling drilling may be taken only after assessment of distribution of critical elements over the plateau.

### Recommendations of TCC-1:

The committee advised that the approved target including pitting should be completed and the analysis presented after evaluating the overall distribution pattern of critical elements within the block. If the findings are encouraging, further or additional exploration may be planned. In case the cost of additional drilling falls within the purview of the TCC, it will be approved accordingly; otherwise, it should be recommended for further approval by the EC.

### Agenda 76.5.16.Preliminary (G3) exploration for Iron and Manganese mineralization at Ramghad Village, Sandur Taluk, Ballari District, Karnataka [Implementing Agency: Ecomen Mining Pvt. Ltd.]

- a. Ecomen Mining Pvt. Ltd. informed that the project was approved in the 35<sup>th</sup> EC Meeting held on 16<sup>th</sup> May, 2024. The sanction order was issued on 10<sup>th</sup> June, 2024 with timeline of 12 months (up to 09.06.2025) and approved cost was INR 1,64,36,127/-.
- b. Ecomen informed that geological mapping, BRS sampling and survey work has been completed and exploratory drilling is due for execution. Exploratory drilling, Pitting and Trenching will be executed after obtaining the forest clearance.
- c. In view of unforeseen delays in obtaining forest clearance, Ecomen sought the committee's approval for an extension of six months, i.e. up to 09.12.2025, to complete the exploration activities.
- d. The committee advised to get forest permission at the earliest and thereafter time extension may be discussed.

### Recommendations of TCC-1:

The TCC-1 recommended to approve timeline extension after thereceipt of Forest Clearance.

19/05/2015

### Annexure1

### List of participants attended 76<sup>th</sup> meeting of Technical-cum-cost Committee (TCC-I) of NMET held on 30<sup>th</sup> April and 01<sup>st</sup> May, 2025 through video conferencing mode

S.no	Name	Designation	Email ID	Contact No	Organization
1	Dr. S. Ravi,	Dy. Director General, GSITI, GSI Hyderabad	s.ravi1@gsi.gov.in	9441138834	Chairman, TCC-1
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3	Shri Hemraj Suryavanshi	Addl. Director General (Retd.), GSI	hemraj.nmet@gmail.com	9425603674 7477042176	Member TCC-1
4	Shri K. Koteswara Rao	Dy.D.G. (Retd.) GSI	kkrao1957@gmail.com	9000117969	Member TCC-1
5	Dr. S. K. Kulshrestha	DDG-RMH-III, NER, GSI, Shillong	s.kulshrestha@gsi.gov.in	9413330658	Member TCC-1
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10	Shri Ravi Kumar Gupta	General Manager (Finance) HCL, Kolkata	ravi_g@hindustancopper.com	9433274328	Member TCC-1
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12	Smt. Vandana	Cost Accounts Officer, RSAS, Bangalore, GSI	vandana@gsi.in	8660939235	Member TCC-1
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15	ShriSelin Raj A	Director (Geophysics)	antony.selinraj@gsi.gov.in	9432014505	RSAS, GSI,



2 mi 19/05/2015

					Bengaluru
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1965/2015

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63		IBM					
			DGM Chhattisgarh				
64		Rep	resentative		DMG Karnataka		
65		Rep	resentative		DGM Odisha		
66		Rep	resentative		CMPDI		
67		Rep	resentative		Kartikay Exploration and Mining Services Pvt. Ltd.		
68			Bhushilp				
69		Natural Resource Division Tata					
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1965/2015

Estimat	ted Cost for Preliminary Exploration (G3) for Area- 1.54 sq. km, No.of BH:5, Bore	N	laharashtra, 100m; Schedul	e timeline- 10 m	_		
			Rates as pe	er NMET SoC 0-21		ed Cost of the	
S. No.	Item of Work *	Unit *	SoC-Item No. *	Rates as per SoC * (a)	Qty. (b)	roposal Total Amount (Rs) (a*b)	Remarks
Α		Drilling	a	I			
1	Surface Drilling (1 Rig)- soft rock	M	2.2.1.1b	7168	150	1075200	
	Trenching	Cu.m.	NA	NA	NA	NA	
	Drilling Camp setting cost	per Drill	2.2.9a	250000	1	250000	
	Drilling Camp winding cost	per Drill	2.2.9b	250000	1	250000	
	Road making (rugged and hilly terrain)	per km	2.2.10b	32200	1	32200	
	Transportation of drilling rig (to &fro)	per km	2.2.8	36	500	18000	
	Labour Wages	No.	5.7 (25 days of drilling)	541	0	0	
	Borehole pillaring (Construction of concrete pillar)(12"*12"*30")	per borehole	2.2.7a	2000	17	34000	
				Sub Tot	al A	16,59,400	
В	Geological Work_ Geological Work_	eological mapping				_	
	Survey Party days	day	1.6.1a	8300	30	2,49,000	
	Geologist (Field days)	day	1.3	11000	90	9,90,000	
	Geologist (HQ days)	day	1.3	9000	30	2,70,000	
	Sample processing work	day	1.5.2	5100	20	1,02,000	
	Labour Wedges for Survey	No.	5.7 (30 days of survey)	541	4	2,164	Amount will be reimburse as per the notified rates by the

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							Central Labour Commissioner or respective State Govt. whichever is higher
	Labour Wedges for Geological work	No.	5.7 (90 days of field work)	541	4	2,164	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
	Labour Wedges for Geological work	No.	5.7 (90 days of field work)	541	4	2,164	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
	DGPS Survey	Per point of Observation		19,200	17	3,26,400	
				Sub Tot	tal B	19,43,892	
С		Laboratory S	Studies		1	1	
1	Chemical analysis						
	i) Primary Samples & Check samples						
	a) For 8 radicals CaO, MgO, SiO <sub>2</sub> , MnO, Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , P <sub>2</sub> O <sub>5</sub> (XRF)	per sample	4.1.15a	4200	150	6,30,000	
	b) 10% Check sample	per sample	4.1.15a	4200	15	63,000	
2	Physical Analysis						
	i) Bulk Density determination	Nos	4.8.3	1568	5	7,840	
	Digital Photographs	Nos.	4.3.7	280	5	1,400	
	Preparation of thin section	Nos.	4.3.1	2353	5	11,765	

Jonathi 1975125-1975125-

	Complete petrographic study report	Nos.	4.3.4	4232	5	21,160	
				Sub Tota	al C	7,35,165	
D		Preservation (	of core				
	Core preservation charges	Nos	5.3	1590	150	2,38,500	
				Sub Tota	al D	2,38,500	
				Total A t	o D	45,76,957	
E	Peer review Charges		As per EC decision			30,000	
F	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 less		91,539	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.
G	Geological Report Preparation		5.2			2,28,848	
Н	Total Est	imated Cost withou	ut GST			49,27,344	
I	Provis	GST will be reimburse as per actual and as per notified prescribed rate					
J	Total E	stimated Cost with	GST			58,14,266	
K				Rs. In La	khs	58.14	
Note:							
1	Strict adherence to the Ministry of Finance						
2	In case of delay/non- performance, the ap govt. of India rules/guidelines on procuren		ll be taken by o	competent authority	ority agair	nst delinquent	agency as per prevailing
3	If any part of the project is outsourced, the case of execution of the project by NEA or						

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4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.
5	Any item of work not mentioned above shall be added as per SoC.
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.

Jonathi 1915125-

19105/2015

													Annexu	ure 2B
Time	Schedule/ Action Plan for Prelimin	nary Exploration Mandangad, Implementi	Distri	ct-Ratn	agiri, N	lahara	ashtra		n area	of villa	ge - Gu	dheg	har, Ta	hsil -
S. No.			1	2	3	4		5	6	7	8		9	10
1	Camp Setting	Months/Days												
2	Geological Mapping & Sampling	days												
3	Survey Party days	days												
4	Forest Clearance	days					>					>		
5	Pitting/Trenching	cu.m					Review					Review		
6	Surface Drilling (1 rig)	m					ev l					ev .		
7	Geologist Man days	days										Œ		
8	Sampler Man days	days												
9	Camp Winding	months												
10	Laboratory Studies	Nos.												
11	Report Writing	months												

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							Annexure 3A
	Estimated Cost for Prelimi Area:4.27 sq.km ,Dril	ling: 800m,B		80 m , Timeli	ne: 10 months ,		
S.		•		er NMET SoC 0-21	Estimated Cos		
S. No.	Item of Work *	Unit *	SoC-Item No. *	Rates as per SoC * (a)	Qty. (b)	Total Amount (Rs) (a*b)	Remarks
Α			Drilling				
1	Surface Drilling (1 Rig)- soft rock	m	2.2.1.1b	7168	800	5734400	
	Trenching	Cu.m.	2.1.1	3330	10	33300	
	Drilling Camp setting cost	per Drill	2.2.9a	250000	1	250000	
	Drilling Camp winding cost	per Drill	2.2.9b	250000	1	250000	
	Road making ((flat terrain)	per km	2.2.10a	22020	1	22020	
	Transportation of drilling rig (to &fro)	per km	2.2.8	36	400	14400	
	Labour Charges	No.	2.2.1.3a	677.78	0	0	
					b Total A	63,04,120	
В			Geological Wo				
	Survey Party days	day	1.6.1a	8300	30	2,49,000	
	Geologist (Field days)	day	1.3	11000	120	13,20,000	
	Geologist (HQ days)	day	1.3	9000	45	4,05,000	
	Sample processing work	day	1.5.2	5100	99	5,04,900	

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19105/2015
	Labour charges for Geological work	No.	5.7 (30 days of survey)	541	240	1,29,840	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
	Labour Charges for Survey	No.	5.7 (90 days of field work)	541	120	64,920	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
	Labour Charges for Sampler	No.	5.7 (90 days of field work)	541	396	2,14,236	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
				Su	b Total B	28,87,896	
С		La	boratory Stud	lies			
1	Chemical analysis						
	i) Primary Samples & Check samples						

Jonathi 1915125-

1965/2015

	a) For 8 radicals CaO, MgO, SiO <sub>2</sub> , MnO, Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , P <sub>2</sub> O <sub>5</sub> (XRF)	per sample	4.1.15a	4200	720	30,24,000	
	b) 10% Check sample	per sample	4.1.15a	4200	72	3,02,400	
2	Physical Analysis						
	i) Bulk Density determination	Nos	4.8.3	1568	2	3,136	
	Digital Photographs	Nos.	4.3.7	280	5	1,400	
	Preparation of thin section	Nos.	4.3.1	2353	5	11,765	
	Complete petrographic study report	Nos.	4.3.4	4232	5	21,160	
					b Total C	33,63,861	
D		Pre	eservation of o	core	1		
	Core preservation charges	Nos	5.3	1590	700	11,13,000	
					ub Total D	11,13,000	
				То	tal A to D	1,36,68,877	
Е	Peer review Charges		As per EC decision			30,000	
F	Preparation of Exploration Proposal	1 no. (5 hard copies with soft copy)	5.1	2% of approved cost or 5 lakhs		2,73,378	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

Jourathi 1915125-

							the TCC-NMET in its meeting				
							while clearing the proposal.				
G	Geological Exploration Report	5 Hard copies with a soft copy	5% of Total Project Cost		5.2	6,83,444					
Н	Total Estimated Cost without GST					1,46,55,698					
I	Provision for GST (18% of L)		26,38,026	GST will be reimburse as per actual and as per notified prescribed rate							
J	Total Estimated Cost with GST	•				1,72,93,724					
K				Rs	. In Lakhs	172.94					
Note:											
1	Strict adherence to the Ministry of										
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.										
3	If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 3 of NMET SoC and Item no. 6 of NMET SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.										
4	Necessary efforts should be made	to minimize any	y adverse impa	act on the env	vironment during exp	oloration activities					
5	Any item of work not mentioned a	bove shall be ad	Ided as per So	C.							
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.										

Jonathi 1975125-1975125-

	Annexure 3B												
Time	Time Schedule/ Action Plan for Preliminary Exploration for Limestone in Bhari Block, Chandrapur district, Maharashtra												
	Implementing Agency : DGM Maharashtra												
S. No.			1	2	3	4		5	6	7	8	9	10
1	Camp Setting	Months/Days											
2	Geological Mapping & Sampling	days											
3	Survey Party days	days											
4	Forest Clearance	days					≥						
5	Pitting/Trenching	cu.m					Review						
6	Surface Drilling (1 rig)	m					lev						
7	Geologist Man days	days					ш						
8	Sampler Man days	days											
9	Camp Winding	months					]						
10	Laboratory Studies	Nos.											
11	Report Writing	months											

Jonathi 1915125-

19105/2015

	Estimated Cost for General Exploration	on (G2) for B	auxite an	d Aluminous I at	erite in Bynd	or Block, Udu	Annexure 4A ni District, Karnataka
Area	2.0042 sq. km, Drilling: 1000 m ( Phase 1 : 30 borehole depth ra	0m, Phase 2 nge - 20 m, S	2: 700m - A Schedule ti	After Review), No	o. of BH: 50 no s Review: Afte	os ( Phase I -14	nos. , Phasell - 36 nos.) Average
		·	Rates as per NMET SoC 2020-21			Cost of the posal	
S. No.	Item of Work *	Unit *	SoC- Item No. *	Rates as per SoC * (a)	Qty. (b)	Total Amount (Rs) (a*b)	Remarks
Α	Geological Work						
	Geological mapping, (1:4000 scale) & sampling, Topographical Survey						
i	a. Charges for Geologist per day (Field) for geological mapping, sampling, pitting works	day	1.3	11,000	120	13,20,000	
ii	b. Labours Charges; Base rate (2 labours/party)	day	5.7	541	240	1,29,840	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
	c. Charges for Geologist per day (HQ)	day	1.3	9,000	45	4,05,000	
	d. Other Geological work: Borehole closing, core logging and sampling, Charges of one Geologist at site (1 Geologist)	day	1.5.1a	11000	0	0	
	e. Charges for one Sampler per day (1 Party)	one sampler per day	1.5.2	5,100	119	6,06,900	

Jonathi 1915125-

1965/2015

	e. Labours (4 Nos)	day	5.7	541	476	2,57,516	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
		Sub Total-A		Γ		27,19,256	
В	Survey work						
а	Charges for one surveyor per day (topographic survey 1:4000 Scale)	day	1.6.1a	8,300	30	2,49,000	
b	Labour (4 Nos.) per party	day	5.7	541	120	64,920	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
с	Demarcation of block boundary, Fixation of Borehole and determination of co-ordinates & Reduced Level (RL) of the borehole by DGPS	Per Point of observation	1.6.2	19,200	62	11,90,400	
		Sub Total-B				15,04,320	
С	Pitting						
	Excavation of pits up to 3 m depth (30 pits)	per cu.m	2.1.2	5,330	0	0	
		Sub Total-C			-	0	
D	DRILLING Outsource (after review)						
1	Core Drilling: 1000 m (Phase 1: 300m, Phase 2: 700m - After Review), No. of BH: 50 nos (Phase I -14 nos., PhaseII - 36 nos.) Grid Phase I - 400*400m, Phase II -200*200m	m	2.2.1.1b	7168	1000	71,68,000	As per Moc rate
2	Drill core preservation (In-house)	Per m	5.3	1590	700	11,13,000	
	Sub Total-D					82,81,000	
E	Laboratory Studies						

Jonathi 1915125-1915125-

1	Chemical Analysis						
i)	Primary samples analysis for 5 radicals viz. Al2O3, SiO2, Fe2O3, TiO2, LOI	Nos	4.1.15a	4200	680	28,56,000	
	External check samples for 5 radicals viz., Al2O3, SiO2, Fe2O3, TiO2, LOI. (10% of total samples)	Nos	4.1.15a	4200	68	2,85,600	
	Analysis for Bauxite						
	A. Combined determination of Tri hydrate Alumina (THA- 40°c) and Mono hydrate Alumina (MHA-240°c) & Reactive Silica (per BH 2 Sample)	Nos.	4.1.17a	6700	100	6,70,000	
2	Physical, Petrological & Mineralogical studies						
	ICP-MS (sequential technique) sample package for 34 elements i.e.16 other elements viz. Li, Ga, In, Be, Ge, Mo, Cr, Ta, W, Ba, Co, Rb, Sr, Zr, Nb, Ni, : 18 REE viz. La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Sc, Y:2 Actinides viz. U,Th (Per BH 2 Sample)	Nos.	4.1.14	7731	100	7,73,100	Analysis of 1 complete bore hole . Remaining from other boreholes.
i)	Preparation of thin section	Nos.	4.3.1	2353	10	23,530	
ii)	Study of thin section	Nos.	4.3.4	4232	10	42,320	
iii)	Digital photographs	Nos.	4.3.7	280	20	5,600	
iv)	Bulk density determination	Nos.	4.1	3540	5	17,700	
3	Beneficiation study						
i)	Collection of sample, transportation and manpower	Per Sample	4.7.1	Costing to be decided by TCC			
ii)	Beneficiation study for G2 stage mineral exploration project	Per Sample	4.7.2	Actual expenses at IBM rate	1	As per actuals	



1965/2015

		Sub Total-E											
		tal Outsource	d			71,68,000							
F		TOTAL A to E				1,71,78,426							
G	Tender process cost	One time	2.3	2% of the approved project cost or 5 Lakh whichever is lower	1	1,43,360							
н	Geological Report Preparation	5 Hard copies with a soft copy	5.2 (iii)	A minimum of 7.5 Lakh or 3% of the work which ever is more	1	7,50,000							
I	Peer review	Per review		As per EC decision		30,000							
J	Preparation of Exploration Proposal	5 Hard copies with a soft copy	5.1	2% of approved project cost or 3.8 lakh whichever is lower	1	3,43,569							
к	Operational charges towards outsourced work	Based on actual outsourced cost	6.0 (iii)	In case of total outsourced cost more than ₹1 crore: ₹8.75 lakh plus 5 percent on the balance amount of		6,62,600							

Jonathi 1915125-

			outso	urced							
			COS	t in							
			excess	; of ₹1							
			cro	re.							
			Maxii	num							
			ceilir	ig of							
			opera	tional							
			charg	es is							
			₹15	lakh							
L	Total Estimated Cost without GST					1,91,07,955					
М	Provision for GST (18% of M)					34,39,432					
Ν	Total Estimated Cost with GST					2,25,47,386					
ο				Rs. In Lakh	hs	225.47					
Note:			· ·								
1	Strict adherence to the Ministry of Financ	e's and GFR	guidelines is man	datory. Every	y transactio	n must adher	e to GFR rule 21.				
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.										
3	If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 3 of NMET SoC and Item no. 6 of NMET SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.										
4	4 Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.										
5	Any item of work not mentioned above sh	all be added	as per SoC.		•	•					
6											
		-			-						

Jonathi 1915125-

1965/2015

													Annexu	ure 4B
	General Exploration (G2) f	or Bauxite and A Implementing							Jdupi I	District	, Karn	ataka		
S. No.			1	2	3	4		5	6	7	8		9	10
1	Camp Setting	Months/Days												
2	Geological Mapping & Sampling	days												
3	Survey Party days	days												
4	Forest Clearance	days					>					>		
5	Pitting/Trenching	cu.m					iev					iev		
6	Surface Drilling (1 rig)	m					Review					Rev		
7	Geologist Man days	days										Ē		
8	Sampler Man days	days												
9	Camp Winding	months					]					]		
10	Laboratory Studies	Nos.												
11	Report Writing	months					]					1		

Jonathi 1915125-

1965/2015

							Annexure 5A					
Total A	Estimated Cost for Preliminary ex Utta Area - 4.75 q Km (2.75 sq.km.+2.00 0m approx., Ponnaiyar North Block Borehole Depth Rai	angarai Sect sq.km.); Nos 08 Bh (1st Le	or, Harur-Úttar a of Borehole M evel -06 Bh X 10 Level Bhs afte pto 200m appro	Agarai Belt, District-Krishna Mannadipatti South Block 20 00m, 2nd Level 02 Bhs X 200 or Review of 1st level BHs x. Completion Time - 15	n <b>giri, Tamil</b> Bh (1st Lev m) = 1000m )	Nadu rel -13 Bh X 100m, 2 n approx. Total drillin	2nd Level 7 Bh X 200m,) ng 3700m approx( 2nd					
	Implementing Agency : MECL   Rates as per NMET SoC 2020-21 Estimated Cost of the Proposal											
S.N	Item of Work	Unit	SoC-Item - SI No.	Rates as per SoC	Qty.	Total Amount (Rs)	- Remarks					
Α	GEOLOGICAL WORK											
1	Detailed Geological mapping (1:2000 scale with Contouring , Borehole logging & Sampling)				4.75 sq.km.		(Mannadipatti South Block (2.75 sq.km.) + Ponnaiyar North Block (2.0 sq.km.)					
а	Charges for two Geologist per day at HQ	day	1.3a	9,000	45	4,05,000						
b	Charges for two Geologist per day at field	day	1.3b	11,000	200	22,00,000	2 Blocks					
с	Labour for Geologist (2 Nos)	day	5.7	541	400	2,16,400	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher					

Jonathi 1915125-

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d	Charges for one Sampler per day (1 Party)	one sampler per day	1.5.2	5,100	139	7,08,900	
e	Labours for sampling work (4 Nos)	day	5.7	541	556	3,00,796	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
	Sub Total A					38,31,096	
В	Ground Geophysical Survey						
а	Induced Polarization (I.P) cum Resistivity S.P and Magnetic	8 –10 Line km	3.4b	14,48,693	4.0	5794772	(Rs.14,48,693/-per 10 Lkm) Total 40 Lkm cumulative
b	Geophysicist party days (HQ) for Data processing & Report	Per day	3.18	9,000	20	1,80,000	
	Sub Total B					59,74,772	
С	Trenching/Pitting						
	a) Excavation of Trenches	per cu.m.	2.1.1	3330	200	6,66,000	(100 cum x 2)
	Sub Total C					6,66,000	
D	DRILLING						
а	Drilling - Hard rock	m	2.2.1.4a	11,500	3,700	4,25,50,000	
b	Borehole deviation Survey by Multishot Camera	m	2.2.6	330	3,700	12,21,000	
С	Land / Crop Compansation (in case the BH falls in agreecultural Land)	per BH	5.6	20,000	28	5,60,000	Amount will be reimburse as per actuals or max. Rs.

Jonathi 1915125-

							20000 per BH with certification from local authorities
d	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	28	56,000	
е	Transportation of Drill Rig & Truck associated per drill	Km	2.2.8	36	5,600	2,01,600	2800 km two way for 2 rigs
f	Monthly Accomodation Charges for drilling Camp (up to 2 Rigs)	month	2.2.9	50,000	6	3,00,000	
g	Drilling Camp Setting Cost	Nos	2.2.9a	2,50,000	2	5,00,000	
h	Drilling Camp Winding up Cost	Nos	2.2.9b	2,50,000	2	5,00,000	
i	Road Making (Flat Terrain)	Km	2.2.10a	22,020	5	1,10,100	Road Making will be considered as per the requirement and Road Making Charges will be reimbursed accordingly.
j	Drill Core Preservation	per m	5.3	1,590	950	15,10,500	
	Sub Total D					4,75,09,200	
E	Survey Work						
а	DGPS Survey of Block Boundary cardinal points by DGPS + BH fixation & RL determination	Per Point of observation	1.6.2	19,200	36	691200	28 Bh points + 8 Boundary points
b	Charges of Surveyor (1 party) for Topographical survey 1:2000 scale (4.4 sq.km with 1m contour interval)	one surveyor per day	1.6.1a	8,300	45	373500	

Jonathi 1915125-

С	Labours Charges for survey work;	day	5.7	541	180	97380	Amount will be reimburse as per the notified rates for unskilled labor by the Central Labour Commissioner or respective State Govt. whichever is
	Sub Total E					11,62,080	
F	Borehole Geophysical Logging (including I.P., S.P., Magnetic Susceptability, Resistivity/Induction Sonde, Dual Density etc.)	5 Bhs of 350m each	3.12	622.25	3,700	23,02,325	10,88,941
	Sub-Total F					23,02,325	
G	LABORATORY STUDIES						
1	Chemical Analysis						
i)	Primary samples (Bedrock/ Channel & Trench)						
	a. For Mo, Cu, Pb, Zn, Sn, W, Ag and Bi by AAS Method	Nos	4.1.7a & b	3,176	150	4,76,400	(50 Bedrock/channel+100 Trench)
	b. Bedrock/channel & Trench Composite samples for 34 Elements by ICP-MS	Nos	4.1.14	7,731	10	77,310	
ii)	External Check samples (10%) (Bedrock/channel & Trench)						
	a. For Mo, Cu, Pb, Zn, Sn, W, Ag and Bi by AAS Method	Nos	4.1.7a & b	3,176	15	47,640	



	Primary samples (BH core)						
	a. For Mo, Cu, Pb, Zn, Sn, W, Ag and Bi by AAS Method	Nos	4.1.7a & b	3,176	850	26,99,600	(15m MZ including HW+FW)
	b. Composite samples for 34 Elements by ICP-MS	Nos	4.1.14	7,731	-	-	
	External Check samples (10%) (BH Core)						
	a. For Mo, Cu, Pb, Zn, Sn, W, Ag and Bi by AAS Method	Nos	4.1.7a & b	3,176	85	2,69,960	
iii)	Petrographic & Mineragraphic samples ( Surface+Bh Core Samples)						
а	Preparation of thin section	Nos	4.3.1	2,353	20	47,060	
b	Complete petrographic study report	Nos	4.3.4	4,232	20	84,640	
с	Preparation of polished section	Nos	4.3.2	1,549	20	30,980	
d	Complete mineragraphic study report	Nos	4.3.4	4,232	20	84,640	
е	Digital Photographs	Nos	4.3.7	280	20	5,600	
iv)	Specific gravity determination	Nos	4.8.1	1,605	5	8,025	
	Total - G					38,31,855	
	Sub Total - (A to G)					6,52,77,328	
н	Geological Report Preparation		5.2	For the projects exceeding Rs.300 Lakhs: A Minimum of Rs. 9 lakhs or 3% of the work whichever is more		19,58,320	

Jonethi 1915125-

19105/2015

1	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	5 Hard copies with a soft copy	5.1/28th EC	2% of the Cost or Rs. 5.0 Lakhs whichever is lower	5,00,000	EA has to submit the Hhard copies and soft copies of final proposal along with maps and plan as suggested by the TCC-NMET in its meeting while clearing the proposal.
J	Peer review Charges		As per EC decision		30,000	
к	Total Estimated Cost without GST				6,77,65,648	
L	Provision for GST (18% of H)	%			1,21,97,817	GST will be reimburse as per actual and as per notified prescribed rate
М	<b>Total Estimated Cost with GST</b>				7,99,63,464	
Ν				Rs. In Lakhs	799.63	
Note:						
1	Strict adherence to the Ministry	of Finance's	and GFR gui	delines is mandatory. Every t	ransaction must adhere to G	iFR rule 21.
2	In case of delay/non- performa prevailing govt. of India rules/gr				etent authority against delir	nquent agency as per
3	If any part of the project is outs In case of execution of the proje					
4	Necessary efforts should be ma				t during exploration activities	S.
5	Any item of work not mentioned					
6	All the Geological Reports and	data are to be	e uploaded or	NGDR as per MERT templat	e by the agency.	

Jonathi 1915125-

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																	An	nexu	re 5B
Pre	eliminary exploration (G3 ) for molybde												ck (4.7	75 sq	<b>.km.)</b> ,	Utta	ingara	ai Sec	tor,
	ŀ	larur-Utta									il Nad	u							
0	[		Imp	olem	entir	ng A	gen	Cy:N	<b>IECL</b>										
SI. No.	Activities	Unit	4	2	2	4	5	6		7	-	NTHS		1	44	10	10	14	15
1	Camp Setting	Month		2	3	4	5	0		1	8	9	10	-	11	12	13	14	15
2	Survey work	Months												-					
	Geological mapping (1:2000 scale) in	WOTUIS																	<u> </u>
3	4.75 sq.km. associated sampling																		
4	Ground geophysical survey	38 Lkm																	
5	Geophysical survey Report	1																	
6	Trenching work	300																	
0		cu.m.							≥					e K					
7	Surface Drilling (2 rig) & associated works	m.							Review					Review					
8	Geologist party days (field)	day							Œ										
9	Sampling Party days, Core Sampling (1 party)	day																	
10	Camp Winding	Month																	
11	Laboratory Studies	Nos.																	
12	Geologist Party days in HQ (1 party)	day												]					
13	Geological Report Writing with Peer Review	Month																	

Jonathi 1915125-



Es	stimated cost for General Exploration [Block area- 2.60 sq		of Borehole-		timeline- 12 months,	Vadakhol Block, Distri Review - 4 & 8 months	
S.				per NMET 2020-21	Estimated Cost	of the Proposal	
S. No.	Item of Work	Unit	SoC- Item -SI	Rates as per SoC			Remarks
			No.		Qty.	Amount (Rs)	
Α	GEOLOGICAL WORK						
1	Geological Mapping (1:1000)-GSI ,topographical survey, Borehole Report writing	logging, sa					
i	Charges for one Geologist- Field	day	1.2	11,000	150	16,50,000	Including collection of beneficiation samples.
ii	Charges for one Geologist - HQ	day	1.2	9,000	45	4,05,000	
iii	2 labours/ party (Rs 541/day/labour) (As per rates of Central Labour Commissioner)	day	5.7	541	300	1,62,300	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt whichever is higher
iv	Core Sampling -1 Samplers Labour charge not included	day	1.5.2	5,100	111	5,66,100	
V	4 labours/ party (Rs 541/day/labour) (As per rates of Central Labour Commissioner)	day	5.7	541	444	2,40,204	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or

Jonathi 1915125-

	Survey						respective State Govt. whichever is higher
2	Survey						
i	Topographical Survey	day	1.6.1a	8300	30	249000	Topographical Survey on 1:1000 (map updation)
ii	4 labours/ party (Rs 541/day/labour) (As per rates of Central Labour Commissioner)	day	5.7	541	120	64,920	
ij	Bore Hole Fixation and determination of co-ordinates & Reduced Level of the boreholes by DGPS and boundary coordinates	Per Point of observation	1.6.2	19,200	40	7,68,000	16 BHs and 7 boundary coordinates + 17 old GSI BHs
		Sub <sup>-</sup>	Total- A			41,05,524	
В	GEOPHYSICAL SURVEY						
i	Self-Potential	Line Km	3.3a	29600	0	-	
ii	Charges for one Geophysicist - HQ	day	3.18	9000	0	-	
		Sub <sup>-</sup>	Total- B			-	
С	TRENCHING						
	Trenching	Cu. M.	2.1.1	3330	100	3,33,000	
		Sub	Total- C			3,33,000	
D	DRILLING						
i	Drilling upto 300m (Hard Rock) (1 rig )	m	2.2.1.4a	11,500	1,750	2,01,25,000	First level Bore hole plan may consider GSI BH
ii	Land / Crop Compansation	per BH	5.6	20,000	16	3,20,000	Amount will be reimburse as per actuals or max. Rs. 20000 per

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							BH with certification from local authorities
iii	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	16	32,000	
iv	Transportation of Drill Rig & Truck associated per drill	Km	2.2.8	36	6,600	2,37,600	Certification in this regard is required to be provided
v	Monthly Accomodation Charges for drilling Camp (up to 2 Rigs)	month	2.2.9	50,000	6	3,00,000	
vi	Drilling Camp Setting Cost	Nos	2.2.9a	2,50,000	2	5,00,000	2 rigs
vii	Drilling Camp Winding up Cost	Nos	2.2.9b	2,50,000	2	5,00,000	2 rigs
viii	Approach Road Making (Flat Terrain)	Km	2.2.10a	22,020	5	1,10,100	Road Making will be considered as per the requirement and Road Making Charges will be reimbursed later
ix	Core Preservation: One complete borehole plus mineralised cores of all the remaining Bhs	m	5.3	1,590	750	11,92,500	This amount will be reimbursed after successful delivery of the cores to concerned libraries/ authorities
		Sub	Total- D			2,33,17,200	
E	LABORATORY STUDIES						
1	Chemical Analysis						
i	Primary & Check samples for Graphite						

Jonathi 1975125-1975125-

	a. Primary Samples for Proximate Analysis of Graphite: Fixed Carbon (FC), Ash (A), Moisture (M) and Volatile Matter (VM)	Nos	4.1.16	3,000	750	22,50,000	Trench-100nos, BH- 600nos, BRS-50
	B-External (10%) Check samples from NABL Lab for Proximate Analysis of Graphite: Fixed Carbon (FC), Ash (A), Moisture (M) and Volatile Matter (VM)	Nos	4.1.16	3,000	75	2,25,000	
	c-XRF analysis for oxides (SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, LOI and V2O5)	Nos	4.1.15a	4,200	10	42,000	
	D-External (10%) Check samples from NABL Lab for XRF analysis for oxides (SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, LOI and V2O5)	Nos	4.1.15a	4,200	1	4,200	
	e-ICPMS Study for 34 elements study	Nos		7,731	50	3,86,550	mineralised zone in one borehole completely
2	Physical & Petrological Studies						
i	Preparation of thin section	Nos	4.3.1	2,353	10	23,530	
ii	Complete petrographic study report	Nos	4.3.4	4,232	10	42,320	
iii	Preparation of polished section	Nos	4.3.2	1,549	10	15,490	
iv	Complete mineragraphic study report	Nos	4.3.4	4,232	10	42,320	
V	Digital Photographs	Nos	4.3.7	280	10	2,800	
vi	Bulk Density studies	Nos	4.8.1	1,605	5	8,025	
vii	Thin section Preparation Raman spectroscopy	Nos	4.3.1	2,353	5	11,765	
viii	Raman Spectroscopy studies	Nos	As per actual	3,500	5	17,500	Price not available in SoC, SOR of GSI has

Jonathi 1915125-

19 les 12025

							been considered.
ix	Beneficiation study for G2 stage mineral exploration project (Complete laboratory scale ore dressing investigation involving studies for recovery of mineral by various physical beneficiation methods)	Per Sample	4.7.2	5,00,000	2	10,00,000	Mix samples from Trench and Bore holes. Price not available in NMET SoC. Actual expenses at IBM rate will be considered (as per actuals)
		Sub T	otal- E			40,71,500	
D		Total	A to E			3,18,27,224	
ш	Geological Report Preparation		5.2	For the projects having cost exceedin g Rs. 300 lakhs A min Rs. 9 lakhs or 3% of the value of work whichever is more		9,54,817	Reimbursement will be made after submission of the final Geological Report in Hard Copies (5 Nos) and the soft copy to NMET.
F	Peer review Charges		As per EC decision			30,000	

Jowathi 1915125-

19105/2025

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		5,00,000	EA has to submit the Hard Copies and the soft copy of the final proposal along with Maps and Plan as suggested by the TCC- NMET in its meeting while clearing the proposal.
н	То	tal Estimated	Cost with	out GST		3,33,12,041	
I		Provision for	<sup>-</sup> GST (18%	of I)		59,96,167	GST will be reimburse as per actual and as per notified prescribed rate
J	г	otal Estimate	al Estimated Cost with GST			3,93,08,208	
К	Rs. In Lacs					393.08	
Note:							
1	Strict adherence to the Ministry of	Finance's and	d GFR gui	delines is mar	ndatory. Every transaction mu	st adhere to GF	R rule 21.
2	In case of delay/non- performance govt. of India rules/guidelines on p		iate action	will be taker	by competent authority again	nst delinquent	agency as per prevailing
3	If any part of the project is outsou case of execution of the project by						
4	case of execution of the project by Necessary efforts should be made	NEA on its of to minimize a	wn, a Cert any advers	ificate regard e impact on t	ing non outsourcing of any co	mponent/proje	ct is required.
	case of execution of the project by	NEA on its o to minimize a bove shall be	wn, a Cert any advers added as j	ificate regard e impact on t per SoC.	ing non outsourcing of any co he environment during explor	mponent/proje ation activities.	ct is required.



														Ar	nnexu	re 6B
G	eneral Exploration (G-2) for Graphite	and Associat Imple						Vadak	hol B	lock,	Distri	ct: Err	nakula	ım, Ke	erala	
SI. No.	Particulars	Months	1	2	3	4		5	6	7	8		9	10	11	12
1	Camp Setting/ mobilization	Months														
2	Geologist days	days														
3	Geophysist days	days														
4	Survey Days (2 party)	days														
5	Trenching	days					view					Review				
6	Drilling (2 rig)	m					vie					vie				
7	Sampling days	days					Re					Re				
8	Camp winding	Months														
9	Laboratory Studies	days														
10	Beneficiation studies	days					1									
11	Geologist days, HQ	days					]									
12	Report Writing with Peer Review	days					]									

Jonathi 1915125-

1965/2025

							Annexure 7A
Total		st for Prelimi prehole - 09	District- Yava ; Borehole de n	(G3) for Limestone in Don atmal, Maharashtra opth range - 50m (BGL); nonths og Agency : MECL			0 Months, Review : after 5
			•	er NMET SoC 2020-21		ated Cost of Proposal	Remarks
S.N	Item of Work	Unit	SoC-Item -SI No.	Rates as per SoC	Qty.	Total Amount (Rs)	
Α	GEOLOGICAL WORK						
1	Geological Mapping (1:4000), borhole logging & sampling and report writing along with Topographic survey						
а	Charges for one Geologist per day at HQ	day	1.3a	9,000	30	2,70,000	
b	Charges for one Geologist per day at field	day	1.3b	11,000	120	13,20,000	
С	Labour for Geologist (2 Nos)	day	5.7	541	240	1,29,840	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
d	Charges for one Sampler per day (1 Party)	one sampler per day	1.5.2	5,100	59	3,00,900	

Jonathi 1975125-1975125-

е	Labours for sampling work (4 Nos)	day	5.7	541	236	1,27,676	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
2	Survey (on 1:4000 Scale)						
a	Bore Hole Fixation and determination of co-ordinates & Reduced Level of the boreholes and block cardinal points by DGPS	Per Point of observation	1.6.2	19,200	13	2,49,600	Block cardinal point- 4 Borehole-9
b	Charges of one Surveyor (1 Party)	one surveyor per day	1.6.1a	8,300	30	2,49,000	Contouring at 2m interval
с	Labours (4 Nos)	day	5.7	541	120	64,920	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
		Sub	Total A			27,11,936	
В	PITTING AND TRENCHING						
i	Pitting	Cu m	2.1.1	3330	30	99,900	
		Sub	o Tota B			99,900	
С	DRILLING						
1	Drilling -Soft rock	m	2.2.1.1b	7,168	450	32,25,600	MoC Rate
2	Land / Crop Compensation (in case the BH falls in agricultural Land)	per BH	5.6	20,000	9	1,80,000	Amount will be reimbursed as per actuals or max. Rs. 20000 per BH with certification from local authorities

Jonathi 1975125-1975125-

3	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	13	26,000	Block cardinal point- 4 Borehole-9
4	Transportation of Drill Rig & Truck associated per drill	Km	2.2.8	36	400	14,400	To & fro
5	Monthly Accomodation Charges for drilling Camp (up to 1 Rigs)	month	2.2.9	50,000	3	1,50,000	
6	Drilling Camp Setting Cost	Nos	2.2.9a	2,50,000	1	2,50,000	
7	Drilling Camp Winding up Cost	Nos	2.2.9b	2,50,000	1	2,50,000	
8	Road Making (Flat Terrain)	Km	2.2.10a	22,020	5	1,10,100	Road Making will be considered as per the requirement and Road Making Charges will be reimbursed accordingly.
9	Drill Core Preservation	per m	5.3	1,590	400	6,36,000	
		Sub	Total C			48,42,100	
D	LABORATORY STUDIES						
1	<u>Chemical Analysis</u>						
i)	Primary samples						
	a. For 10 radicals i.e. CaO, MgO, Al2O3, SiO2, Fe2O3, SO3, P2O5, K2O, Na2O and LOI by XRF	Nos	4.1.15a	4,200	430	18,06,000	Borehole Core-400 Pit-30
ii)	External Check samples (10%)						
	a. For 10 radicals i.e. CaO, MgO, Al2O3, SiO2, Fe2O3, SO3, P2O5, K2O, Na2O and LOI by XRF	Nos	4.1.15a	4,200	43	1,80,600	
iii)	Petrological samples ( Bh Core Samples)						

Jonathi 1975125-1975125-

i	Preparation of thin section	Nos	4.3.1	2,353	5	11,765	
ii	Study of Thin Section	Nos	4.3.4	4,232	5	21,160	
iv)	Bulk Density Determination						
	Bulk Density	No.	4.10	3,540	2	7,080	
		Sub	o Total D			20,26,605	
Е		Sub To	otal (A to D)			96,80,541	
F	Geological Report Preparation		5.2	For the projects exceeding Rs. 50 Lakhs but less than 150 Lakhs: A Minimum of Rs. 2.5 lakhs or 5% of the work whichever is more		4,84,027	EA has to submit the final Geological Report in Hard Copies (5 Nos) and soft copy to NMET
G	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	5 Hard copies with a soft copy	5.1/28th EC	2% of the Cost or Rs. 5.0 Lakhs whichever is lower		1,93,611	EA has to submit the Hard copies and soft copies of final proposal along with maps and plan as suggested by the TCC- NMET in its meeting while clearing the proposal.
Н	Peer review Charges		As per EC decision			30,000	
I	Total Estimated Cost without GST					1,03,88,179	
J	Provision for GST (18% of I)	%				18,69,872	GST will be reimburse as per actual and as per notified prescribed rate
К	Total Estimated Cost with GST					1,22,58,051	
				Rs. In Lakhs		122.58	

Jonathi 1915125-

Note:	
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.
3	If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 3 of NMET SoC and Item no. 6 of NMET SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.
5	Any item of work not mentioned above shall be added as per SoC.
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.

Gonathi 1915125-1915125-

												Annex	ure 7B`
	Preliminary Exp	Dist	rict- Y	or Limes 'avatma nting Ag	l, Maha	rashtra		Kasara I	Block,				
SI.	Activities	Unit					1	MONTH	-	-			
No.		-	1	2	3	4	5		6	1	8	9	10
1	Camp setting	month											
2	Survey party days (1 Party)	day											
3	Trenching / Pitting	cu.m											
4	Surface drilling (1 rig)	m.											
5	Geologist party days in field (1 Party)	day						× ≥					
6	Sampling party days for trench/pit and core sampling (1 party)	day						E V I					
7	Camp winding	month						Ĕ					
8	Laboratory studies	day											
9	Geologist party days in HQ (1 Party)	day											
10	Geological Report writing with peer review	month						]					

Jonathi 1975125-1975125-

							Annexure 8A
А	Estimated rea: 3.80 sq.km, No. of Boreh	oles: 20, Drilling (	ck, YSR (Ka after Revie 10	dapa) District, A	ndhra P 50m, So	radesh	
			Rates as	per NMET SoC	Estim	ated Cost of Proposal	
S. No.	Item of Work *	Unit *	SoC- Item No. *	Rates as per SoC * (a)	Qty. (b)	Total Amount (Rs) (a*b)	Remarks
	Phase I						
Α	Geological Mapping Other Geological Work & Surveying						
	Geological mapping (1:2000 scale), pitting & geochemical sampling, drilling, core logging						
1	Charges for Geologist per day (Field) for geological mapping, pitting & geochemical sampling	day	1.2	11,000	140	15,40,000	
2	Labours Charges; Base rate	day	5.7	541	280	1,51,480	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
3	Charges for one Sampler per day (1 Party)	one sampler per day	1.5.2	5,100	128	6,52,800	

Jonathi 1915125-19165/2015

4	Labours (4 Nos) for sampling	day	5.7	541	512	2,76,992	
5	Geologist (HQ)	day	1.2	9,000	45	4,05,000	
	Sub Total- A					30,26,272	
В	Ground Geophysical Survey						
1	a. Gravity-Magnetic Survey	Station	3.1b	4,500	700	31,50,000	
	b. IP Survey	Line km	3.4a	69,950	50	34,97,500	
2	Geophysicist party days (Field)	per day	3.18	11,000	-	-	
3	Labours Charges - 4 No	day	5.7	541	-	-	
4	Geophysicist party days (HQ)	per day	3.18	9,000	20	1,80,000	
	Sub Total- B					68,27,500	
С	Survey work						
1	Demarcation of Block boundary by DGPS,Bore Hole Fixation and determination of co- ordinates & Reduced Level of the boreholes by DGPS	Per Point of observation	1.6.2	19,200	27	5,18,400	
2	Topographical Survey (on 1:2000 Scale)	day	1.6.1a	8,300	30	2,49,000	

Jonathi 1915125-1915125-

3	Labours Charges for survey work - 4 no	day	5.7	541	120	64,920	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
	Sub-Total C					8,32,320	
						0,000,000	
D	Trenching/Pitting/Auger Drilling						
1	Excavation of Pits (depth 2.5m)	per cu.m	2.1.2	3,800	-	-	
2	Excavation of Trenches (depth 2.5m)	per cu.m	2.1.1	3,300	150	4,95,000	
	Sub-Total D					4,95,000	
E	LABORATORY STUDIES						
1	Chemical Analysis (ICP- MS) (Ni, Co, Cr, Cu, Pb, Zn, Ba, Mo, Rb, Sc, Sr, V, Zr)						
i)	Geochemical Sampling- Surface samples (BRS)						
	ICP-MS- 34 Elements package	Nos	4.1.14	7,731	100	7,73,100	
ii)	Surface Check samples (10% External)						
	ICP-MS 34 Elements package	Nos	4.1.14	7,731	10	77,310	
iii)	Trench samples						

Jonathi 1915125-19165/2015

	ICP-MS 34 Elements package	Nos	4.1.14	7,731	100	7,73,100	
iv)	Pit+Trench Check samples (10% External)						
	ICP-MS 34 Elements package	Nos	4.1.14	7,731	10	77,310	
2	Analysis for PGE (Pt, Pd, Ru, Rh, Ir, Os)						
	ICP-MS Ni-S Fire Assay	Nos	4.1.5d	11,800	20	2,36,000	
3	Whole Rock Analysis						
i	XRF Analysis for Major Oxides	Nos	4.1.15a	4,200	40	1,68,000	Core samples - 15, BRS-25
ii	Analysis for Minor Elements (ICP-MS for 34-Elements) (Ni, Co, Cr, Cu, Pb, Zn, Ba, Be, Bi, Cd, Cs, Ga, In, Li, Mo, Nb, Rb, Sb, Sc, Se, Sr, Sn, Ta, Te, Ti, V, W, Zr, Y, Th, U)	Nos	4.1.14	7,731	40	3,09,240	Core samples - 15, BRS-25
4	Analysis for REE						
	ICP-MS for 14 REE Elements	Nos	4.1.13	5,380	-	-	
5	Physical & Petrological Studies						
i	Preparation of thin polished section	Nos	4.3.1	2,353	40	94,120	
ii	Study of thin polished	Nos	4.3.4	4,232	40	1,69,280	

Jonathi 1915125-

19105/2015

	section						
iii	Digital Photographs	Nos	4.3.7	280	20	5,600	
iv	XRD Analysis	Nos	4.5.1	4,000	10	40,000	
v	EPMA studies	per hour	4.4.1	8,540	10	85,400	5 samples considered
	Sub-Total E					28,08,460	
	Sub-Total of Phase I					1,39,89,552	Review
	Phase II- After Review						
F	DRILLING- In House						
1	Drilling upto 300m (Very Hard Rock)	m	2.2.1.5a	12,650	1,250	1,58,12,500	
2	Borehole deviation Survey by Multishot Camera	m	2.2.6	330	1,250	4,12,500	
3	Land / Crop Compensation (in case the BH falls in agricultural Land)	per BH	5.6	20,000	5	1,00,000	As per actual
4	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	20	40,000	
5	Transportation of Drill Rig & Truck associated per drill (1 rig)	Km	2.2.8	36	2,500	90,000	Transportation of 1 drill rig from Raipur, Chhattisgarh to Vemula, AP
6	Monthly Accommodation Charges for drilling Camp (1 Drill Rig)	month	2.2.9	50,000	5	2,50,000	
7	Drilling Camp Setting Cost	Nos	2.2.9a	2,50,000	1	2,50,000	
8	Drilling Camp Winding up Cost	Nos	2.2.9b	2,50,000	1	2,50,000	
9	Road Making (Flat Terrain)	Km	2.2.10a	22,020	8	1,76,160	

Gonathi 1915125-1915125-

10	Drill Core Preservation	per m	5.3	1,590	750	11,92,500	
	Sub Total F					1,85,73,660	
G	BOREHOLE GEOPHYSICAL LOGGING						
1	Induced Polarisation (I.P)	m	3.11p	93	1,250	1,16,250	
2	Self-Potential (SP)	m	3.11b	39	1,250	48,750	
3	Geophysicist (Field)	day	3.18	11,000	-	-	
4	Labour (2 No) for BH geophysical survey	day	5.7	541	-	-	Amount will be reimbursed as per the notified rates by the Central Labor Commission or respective State Govt. whichever is higher
5	Geophysicist (HQ)	day	3.18	9,000	-	-	
	Sub Total G					1,65,000	
Н	LABORATORY STUDIES						
i	Drill Core samples						
	ICP-MS	Nos	4.1.14	7,731	600	46,38,600	
ii	Drill Core Check samples (10%External)						
	ICP-MS	Nos	4.1.14	7,731	60	4,63,860	
2	Analysis for PGE (Pt, Pd, Ru, Rh, Ir, Os)						
	ICP-MS Ni-S Fire Assay	Nos	4.1.5d	11,800	30	3,54,000	

Gonathi 1915125-1915125-
3	Whole Rock Analysis						
i	XRF Analysis for Major Oxides	Nos	4.1.5a	4,200	-	-	
ï	Analysis for Minor Elements (ICP-MS for 34-Elements) (Ni, Co, Cr, Cu, Pb, Zn, Ba, Be, Bi, Cd, Cs, Ga, In, Li, Mo, Nb, Rb, Sb, Sc, Se, Sr, Sn, Ta, Te, Ti, V, W, Zr, Y, Th, U)	Nos	4.1.14	7,731	-	-	
4	Analysis for REE						
	ICP-MS for 14 REE Elements	Nos	4.1.13	5,380	15	80,700	
5	Physical & Petrological Studies						
i	Preparation of thin polished section	Nos	4.3.1	2,353	20	47,060	
ii	Study of thin polished section	Nos	4.3.4	4,232	20	84,640	
iii	Digital Photographs	Nos	4.3.7	280	20	5,600	
iv	Specific Gravity Determination	Nos	4.8.1	1,605	10	16,050	
6	Isotope Study						
i	Sulphur (S) isotopic analysis	Nos	As per Govt. Org	20,000	10	2,00,000	As per actual

Gonathi 1915125-1915125-

ii	Lead (Pb) isotopic analysis using MC-ICPMS	Nos	As per Govt. Org	38,700	10	3,87,000	As per actual
	Sub Total H					62,77,510	
	Sub-Total of Phase II					2,50,16,170	
I	Total Phase I + II					3,90,05,722	
J	Geological Report Preparation	5 Hard copies with a soft copy	5.2	iii		11,70,172	Reimbursement will be made after submission of the final Geological Report in Hard Copies (5 Nos) and the soft copy to NMET.
К	Peer review Charges		As per EC decision			30,000	
L	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. 5.0 Lakhs whichever is less		5,00,000	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.
М	Total Estimated Cost without GST					4,07,05,894	
N	Provision for GST (18% of K)					73,27,061	GST will be reimbursed as per actual and as per notified prescribed rate

Gonathi 1915125-1915125-

Ο	Total Estimated Cost with GST			4,80,32,955								
Ρ			Rs. In Lakhs	480.33								
Note:												
1	Strict adherence to the Minis	stry of Finance's and	GFR guidelines is mandate	ory. Every transact	ion must adhere to GFR rule 21.							
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.											
3		ecution of the proje			of NMET SoC and Item no. 6 of rding non outsourcing of any							
4	Necessary efforts should be	made to minimize an	y adverse impact on the e	nvironment during	exploration activities.							
5	Any item of work not mentioned above shall be added as per SoC.											
6	All the Geological Reports a	nd data are to be uplo	baded on NGDR as per ME	RT template by the	agency.							

Jonathi 1915125-

															nnexu	
	Preliminary Exploration (G3) for Nickel		n & Ra lemer					lock,	YSR	(Kada	pa) D	istric	t, And	hra F	rades	h
	Activity	Type of							Mo	nths						
	-	Job	1	2	3	4	5	6		7	8	9	10		11	12
	<u>Phase I</u>															<u> </u>
1	Desktop study (including obtaining clearances etc)	HQ														
2	Camp setting	Field														
3	Geological Mapping (including bedrock sampling, pitting & trenching)	Field														
4	Topography Survey	Field														
5	Geophysical survey (including mobilization & data acquisition)	Field							>					>		
6	Geophysical survey (interpretation & report)	HQ							Review					Review		
7	Laboratory Studies of Surface Samples	Field							œ					œ		
	Phase II															ł
8	Drill Rig mobilization	Field														
9	Drilling	Field														
10	Borehole Geophysical Survey	Field														
11	Camp winding up	Field														
12	Laboratory Studies of Core Samples	Field														L
13	Geological Report Preparation & submission to NMET	HQ														

1915125-

19105/2015

										Annexure 9
	Estimated	cost for P	reliminar	A Timeline: 12 mc	rea: 6. onths, I	5 sq. km.		, Dist: Keo	onjhar, Odis	ha
			Rates as per NMET SoC 2020-21		Estimated Cost of the Proposal		Rates as per NMET SoC 2020-21		ed Cost of roposal	Remarks/Justification
SI. No.	Item of Work *	Unit	SoC- Item No. *	Rates as per SoC * (a)	Qty. (b)	Total Amount (Rs) (a*b)	Rates as per SoC * (a)	Qty	Total Cost (Rs.)	
	Mapping(1:4000)									
	Inhouse									
1	Geology HQ	Man days	1.5.1b	9000	50	450000	9000	30	270000	
2	Geology Field	Man days	1.5.1b	11000	150	1650000	11000	100	1100000	
	Labour			504	300	151200	541	200	108200	
	Outsourced Component									
	XRF (Major Oxides)	4.1.15a		4200	300	1260000	4200	44	184800	As drilling was not carried out in the area, so core samples were not analysed and complete samples for XRF studies were not utilized and only BRS samples were analyzed.

Gonathi 1915125-1915125-

	External Check (10%)	4.1.15a		4200	30	126000	4200	0	0	
	Preparation of thin section	4.3.1		2353	5	11765	2353	0	0	
	Study of thin Section	4.3.4		4232	5	21160	4232	0	0	
	Digital Photography	4.3.7		280	5	1400	280	0	0	
3	Sampler	Per Sampler	1.5.2	5100	41	209100	5100	0	0	
	Labour			504	164	82656	504	0	0	
4	DGPS Survey	Points	1.6.2	19200	11	211200	19200	0	0	
	Surveyor	Per day		8300	30	249000	8300	0	0	As drilling was not carried out in the study area, so DGPS survey only for the block boundary was carried out and not for the BHs collar points.
5	Drilling in Hard Rock	Per Meter	2.2.1.5	12650	750	9487500	12650	0	0	Based on the field observations & analytical data of BRS sample no mineralized zone was identified. Hence assessment of subsurface continuity of mineralization was not required.
	Total					11659781			1663000	
	Drill core preservation	5.3		1590	350	556500	1590	0	0	No drilling, so no core preservation required.

Gonathi 1915125-1915125-

	Sub Total (1 to 8)				14467481						
	Peer Review				30000		30000				
	Preparation of Exploration Proposal	5.1			289350		33260	to be calculated			
	Tender processing cost	2.3			233196	NA					
	Operational Charges	6iv			957989	NA					
9	Geological Report with 5 copies	5.2	5.2	A minimum of Rs. 2.5 lakh or 5% of the Project Cost, whichever more	723374		150000	to be calculated			
		TOTAL	1		16701389		1876260				
	(	GST(18%)			3006250		337727				
	Tot	al with GS	БТ		19707639		2213987				
	F	Rs. In lacs			197 lakh		22.14				
Note:											
1	Strict adherence to the M	linistry of	Finance	e's and GFR guidelir	nes is mandatory	. Every transaction	must adhere to G	FR rule 21.			
2	In case of delay/non- p prevailing govt. of India				will be taken b	by competent auth	ority against deli	nquent agency as per			
3	If any part of the project In case of execution of t										
4											
5	5 Any item of work not mentioned above shall be added as per SoC.										
6	All the Geological Repor	te and da	ta aro to	be unloaded on NG	DB as nor MEBT	tomplate by the ea	0000				

Jonathi 1915125-

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							Annexure 10A
		Estimated Co			Analysi	s of Mine Samples	
		1		gency : IBM			
S. No.	Item of Work	Unit	Rates as per		Total C	ost of the Project	Remarks
5. NO.		Unit	SoC-Item -SI No.	Rates as per SoC	Qty.	Total Amount (Rs)	Remarks
1.0		Othe	r Geological W	ork/ Activities	Miscella	aneous Charges	
1.1	Sampling man days - sampler (core sample.) Labour charges not included	day	1.5.2	₹ 5,100.00	418	₹ 21,31,800.00	3340 (total samples)/8 (no. of samples processed each day)
1.2	4 Labours/ sampler (Rs 541/day/labour)(as per rates of central Labour Commissioner) for sampling work	day	5.7	₹ 541.00	1672	₹ 9,04,552.00	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. Whichever
		Sub Tota	al 1			₹ 30,36,352.00	
2.0				_aboratory Stu	udies	·	
2.1	Estimation on of major oxides by XRF technique	per sample	4.1.15a	₹ 4,200.00	3340	₹ 1,40,28,000.00	
2.2	14 REE elements/radicals by ICP	per sample	4.1.13	₹ 5,380.00	3340	₹ 1,79,69,200.00	
2.3	34 trace elements by ICP- AES	per sample	4.1.14	₹ 7,731.00	3340	₹ 2,58,21,540.00	
2.4	Gold by fire assay technique	per sample	4.1.5a	₹ 2,380.00	3340	₹ 79,49,200.00	
2.5	pge (IGP-MS Ni-S Fire	per sample	4.1.5d	₹ 11,800.00	3340	₹ 3,94,12,000.00	

Jonathi 1915125-

19605/2025

	assay)						
2.6	Fixed Carbon in Graphite	per sample	4.1.16	₹ 3,000.00	100	₹ 3,00,000.00	
		Sub Tota	al 2			₹ 10,54,79,940.00	
L	Total	<b>Estimated Cos</b>	st without GS	T		10,85,16,292	
М	Pr	ovision for GS	Г (18% of J)		1,95,32,932.56	GST will be reimburse as pe actual and as per notified prescribed rate	
Ν	Tota	al Estimated Co		12,80,49,225			
				khs	1,280.49		
				Note:			
1	Strict adherence to the Min	istry of Finance	e's and GFR g	uidelines is ma	Indatory	y. Every transaction	n must adhere to GFR rule 21.
2	In case of delay/non- perfo prevailing govt. of India rule				en by co	ompetent authority	against delinquent agency as pe
3		execution of t					3 of NMET SoC and Item no. 6 o parding non outsourcing of any
4	Necessary efforts should be	e made to mini	mize any adve	erse impact on	the env	rironment during ex	ploration activities.
5	Any item of work not mention	oned above sh	all be added a	s per SoC.			

Jonathi 1975125-1975125-

Tim	Annexure 10B Time Schedule/ Action plan for Financial Assistance from NMET funds for Undertaking Geo-chemical Analysis of Mine samples Agency : IBM											
S.no.	Activities	2025										
	Activities	April	May	June	July	August	September	October				
1	Collection of samples from Mines and Plants											
2	Sampling and Analysis of the samples Collected											
3	Identification of potential Ares for further study											

Jonathi 1975125-1975125-

## Annexure 11

## Timeline Extension for Ongoing Projects Approved / Recommended in the 76thMeeting of TCC-1

S. No.	Block/Project	Agency	Actual date of	Timeline	Extension	Approval / Recommendation in 76 <sup>th</sup> TCC- 1			
		, goney	completion	Extended Timeline	Approving Authority	Timeline	Status	Reason	
1.	Multi-sensor aero-geophysical surveys over blocks 7 & 9 (extension of project contract timeline of NAGMP Blocks 7 & 9)	GSI	31.03.2025	30.06.2025	31 <sup>st</sup> EC	31.03.2027 (21 months)	Recommended to EC	Redeployment of aircrafts by PIA	
2.	Preliminary Survey (G3) for graphite in Lamer-Panga Block-A (13.99 sq. Km) in Kalahandi district of Odisha.	OMC	02.06.2024	31.03.2025	40 <sup>th</sup> EC	31.05.2025 (2 months)	Recommended to EC	GR Submission	
	Preliminary exploration (G3)			2.12.2024	70 <sup>th</sup> TCC				
3.	for Gold Exploration in Dimirimunda Block (5 Sq. Km), District: Keonjhar, Odisha.	OMC	04.10.2024	31.03.2025	40 <sup>th</sup> EC	15.05.2025 (1.5 months)	Recommended to EC	GR submission	
	Preliminary exploration (G3) for			14.03.2025	71 <sup>st</sup> TCC	15.05.2025	Recommended		
4.	Iron ore in Madhyapur Block (6.5 Sq.Km), District: Keonjhar, Odisha.	OMC	14.12.2024	30.04.2025	41 <sup>st</sup> EC	(15 days) recommended	to EC	GR submission	
5.	Preliminary Exploration (G3) for Limestone in Malkhed-1 North, Malkhed-1 South, Malkhed-2 North and Malkhed-2 South	MECL	21.04.2025	-	-	30.06.2025 (2.5 months)	Approved	For GR submission	



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	Blocks (over an extent of 18.02 sq. km), Gulbarga District, Karnataka							
6.	Preliminary Exploration (G3) (Phase-1) for Gold in Kudrekonda Area (by Geophysical Survey, Devangere District, Karnataka.	MECL	26.02.2025	25.05.2025	73 <sup>rd</sup> TCC	25.06.2025 (1 month)	Recommended to EC	For GR submission
7.	Reconnaissance Survey (G4) for Graphite in Darukona Area, Rayagada, Odisha.		14.12.2024	31.03.2025	39 <sup>th</sup> EC	31.05.2025 (2 months in 75 <sup>th</sup> TCC-I) 30.06.2025 (1 month)	Recommended to EC	For GR submission
8.	Reconnaissance Survey (G4) for Graphite in Kanapulisi Area, Rayagada, Odisha.	MMPL	12.12.2024/ 14.12.2024	31.03.2025	39 <sup>th</sup> EC	31.05.2025 (2 months in 75 <sup>th</sup> TCC-I) 30.06.2025 (1 month)	Recommended to EC	For GR submission
9.	Preliminary Exploration (G3) for Copper and associated Mineralization in Govindpur Block (0.83 sq.km.), Chandrapur District, Maharashtra.	Exploration	20.04.2025	-	-	20.07.2025 (3 months)	Approved	For GR submission

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