

**PROPOSAL FOR
RECONNAISSANCE SURVEY FOR IRON
ORE IN NARAYANPUR
(NOTIFIED AREA) OF DISTRICT
NARAYANPUR, CHHATTISGARH (G-4)
(THROUGH NMET FUND)**



**GOVERNMENT OF CHHATTISGARH
MINERAL RESOURCES DEPARTMENT**

**RECONNAISSANCE SURVEY FOR IRON ORE IN NARAYANPUR (NOTIFIED AREA)
OF NARAYANPUR DISTRICT (C.G.)**

EXPLORATION -5

SUMMARY OF THE BLOCK:

1	Title of Project	Reconnaissance survey for Iron Ore in Narayanpur (Notified area) of Narayanpur District
2	Mineral/minerals to be explored	Iron Ore
3	Objective	Demarcation and Assessment of Iron Ore deposits
4	Level of proposed Explored (G4/G3/G2/G1)	G-4
5	State District Block Area	Chhattisgarh Narayanpur Narayanpur (Notified Area)
6	Top sheet No.	65 E/7
7	Total Area and Coordinates of the area/block (latitude/Longitude)	<ul style="list-style-type: none"> ➤ 100 Sq.km.for mapping (1:12,500 scale) <ul style="list-style-type: none"> A. 81°15'00" - 19°22'30" B. 81°20'00" - 19°22'30" C. 81°20'00" - 19°15'00" D. 81°15'00" - 19°15'00" ➤ 52.32 Sq.km. (thrust area) <ul style="list-style-type: none"> A. 81°15'00" - 19°20'00" B. 81°18'14.41" - 19°20'00" C. 81°18'14.41" - 19°15'00" D. 81°15'00" - 19°15'00"
8	Background information a. Previous work b. Present status of the block. c. Mineral Concession status (leases)	GSI mapped on 1:50000 scale(50K map) Unexplored block Lapsed PL area
9	Status of various clearances	Local/Forest/other-Forest clearances is to be taken
10	Brief account of work proposed in the area and expected outcome	Reconnaissance survey (G-4) and demarcation of area for further details exploration work.

COST ESTIMATE FOR PRELIMINARY EXPLORATION FOR IRON ORE IN NARAYANPUR (G-4) DIST, NARAYANPUR, CHHATTISGARH								
SL. No.	Item of work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840		0	0	0
2	Geologist Party Days (1 Party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days (2 parties)	day	525	600	500	330000	500	330000
4	Reconnaissance Geological							
	Sub Total A					1110200		1110200
B	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	500	3390000	500	3390000
2	Road making (Flat Terrain)	Km.	7800	18563		0	0	0
	Sub Total B					3390000		3390000
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	(i) for Primary Samples 6 radicals (Fe%, Mn%, SiO2%, Al2O3%, P%, S%)	Nos	490 (76×5+110)	2580	500	1290000	500	1290000
	(ii) for Composit Samples 6 radicals (Fe%, Mn%, SiO2%, Al2O3%, P%, S%)	Nos	490 (76×5+110)	2580	50	129000	50	129000
	(iii) for Check Samples 6 radicals (Fe%, Mn%, SiO2%, Al2O3%, P%, S%)	Nos	490 (76×5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparation	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	MInerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub Total C							1578990
	Total A+B+C					4500200		6079190
D	Report Writing	Nos	60000	120000	1	120000	1	120000
	Sub Total					120000		120000
	Total A to D							6199190
E	GST 18%							1115854
	Grand Total: with GST 18%							7315044
							Total in Lacs	73.15
Note:								
1	Revised rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006M.I., dated-02/07/2014 and based on actual escalation as per RBI Indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in revised Rates of Promotional Work of MoM scheduled							
3	**Nityanand Committee Rates with actual escalation as per RBI Index as on 31.03.2017 and the same for subsequent year.							
4	***As approved in the 12th meeting of the Technical Committee & the meeting of Executive Committee of NMET.							
5	****Rate has taken from Schedule of Charges of different activities of GSI on 2014-15 and 40% escalation on the same has been considered for F.Y. 2018-19							

Mineral Exploration and evaluation 18% (SAC Code: 998343)

Reconnaissance survey (G-4 level) for Iron ore Exploration Notified Area
In 100 sq. km. area District Narayanpur (Chhattisgarh)

1. Introduction:

Iron Ore due to their unique physical, mechanical and electrical properties, has plays a vital role in the industrial growth of a nation.

Directorate of Geology & Mining Chhattisgarh has decided 10 Nos, Mineral Exploration Blocks for G-4 level of Exploration. The Regional Exploration for Iron Ore Mineralization in District Dantewada (Block ID Exploration-07) in 100 sq. km. area District Dantewada, (CG). Accordingly, DGM CG prepared proposal for reconnaissance survey and being put up for approval of Technical/ Executive Committee of NMET.

2. Location of the Block:

The district headquarter Narayanr is about 67 km from the block. The nearest township is Orachha on Narayanpur - Orachha road of the block. The block is located in the Survey of India Topo-sheet No.65E/7. The co-ordinates of the corner points of the block is given above and covers an area of nearly 100 sq. km

3. Physiology and Drainage:

The block area in general is of undulating terrain. Iron ore is occurring as discontinuous small isolated mounds as well as in float bouldery form, in association with quartzite. The iron ore occurrence is about 88 km from well-known Rowghat Iron Ore deposit. The highest peak of 1007 m from mean sea level is at Tulab dongar near village wakeli and lowest point of is 460m msl at junction point of Orachha nala and Gudra river near village Marora.

Dendritic to subdendritic pattern of drainage is prevalent in the area. The drainage in the southern is mainly controlled by Gudra river which flows in Southeastern direction and acts as tributary to Indrawati River.

4. Previous work:

P.N. Bose (1890-1900) was first to carry out geological survey in Bastar region. Crookshank and Ghosh (1932-38) mapped the southern part of the Bastar. Crookshank (1963) classified the metamorphics of south Bastar into Sukma, Bengpal and Bailadila Groups.

In recent years a number of workers have carried out detailed study in various parts of the district, viz. Dutta (1956-57), Prasad and Banerjee (1962), Krupanidhi (1960-62), Ramakrishna and Dutta (1970), Narain, Pandhare and Pal (1972), Mishra, Dutta, Kanchan and Sisodiya (1970). As a result of these recent studies the metasediments of the Bastar have been classified into a composite Bengpal Group and Bailadila Group.

The first geological account of the Rowghat area has been given by D.K. Chatterjee (1949), who established the geological succession of the area and described the six major iron ore deposits (A, B, C, D, E and F) for the first time, indicating that the deposit “F” is the largest among these. He estimated a reserve of 740 million tonnes of iron ore (including 496 million tonnes from “F” deposit) with average 64% Fe.

Seetha Ramaiah (1960) examined the deposit “F”, selected A and B blocks for detailed exploration and estimated the grade of the deposit as 64.37% Fe. The “F” deposit has been explored in detail by Yewale, Subramanian (1971-1973), Yewale and Narain (1974) Satyanarayan and Choubey (1974) carried out geological, geomorphological and structural study of the area.

The area adjacent to Rowghat in the Toposheet No. 65 E and 65 A, were mapped by various workers viz. S. Singh, U. Prasad, A.K. Banerjee and S. Sen (1961-62 & 1963), four iron ore bodies were located by S. Singh et. al.

V. K. Saxena and C. S. Bhardwaj (2006-07) and S.K. Tiwari and V.K. Saxena (2007-2008) of DGM Chhattisgarh carried out the survey of Iron ore in Rowghat area.

5. Geology and Structure:

5.1. Regional Geology and structure of the area.

5.2. The Litho units exposed in and around the region of the block are represented by quartz mica schist, banded magnetite quartzite (BMQ) and granite gneiss of Bengpal Group and banded haematite quartzite (BHQ) of Bailadila Group intruded by acid and basic dykes. The Regional Stratigraphic sequence of litho units (after GSI) is given below.

Lithology	Stratigraphic status	Age	Nature and Characteristics
	Group		
Soil/ Laterite	-	Cainozoic	Dark grey, dark brown, pale yellow to Yellowish brown.
Basic Dyke	-	Meso Proterozoic	Greyish to greenish black, medium to coarse grain, massive, hard and compact rock.
Quartz reef/ vein	-	Paleo to Meso Proterozoic	Quartz reef/vein; White to grayish white pink, medium to coarse-grained rock.
Granite	Dongargarh Granite	Paleo to Proterozoic	Pink grey fine to very coarse grained, massive, hard and compact rock. Composition varies from biotite granite, amphibole granite to leucogranite.
Banded Haematite Quartzite (BHQ)/Banded Haematite Jasper (BHJ)	Bailadila Group	Archaean to Palaeo Proterozoic	Consist of alternate pinkish to buff colour layers of quartzite / Jasper and dark grey to steel grey metallic layers of iron ore.
Granite gneiss, migmatite, paragenesis streaky gneiss, augen gneiss, Hornblende gneiss & biotite gneiss (Gneissic complex)	Bengal Group	Archaean	Gneisses; Light grey to greenish grey, fine to coarse grained, well foliated, hard and compact rock. Migmatite; Comprises leucosome bands of quartz feldspar and melanosome bands of biotite, hornblende.
Banded magnetite Quartzite(BMQ) Banded Grunerite Quartzite(GMQ)			BMQ; Medium to coarse grained, banded; consist of alternate band of quartzite and magnetite with Grunerite and actinolite as accessories. GMQ; Medium to coarse grained, banded; consist of alternate band of quartzite and Grunerite, magnetite.

Amphibolite, hornblende schist, metabasics, meta-Ultramafic & talc - tremolite schist Andalusite schist, tremolite schist and quartz mica schist.	Bengal Group		Amphibolite; Dark green to greenish black medium to coarse grained, banded foliated rock and grade to hornblende schist. Metabasic; Dark green to greenish green, fine grained, massive to foliated rock and grades to hornblende schist, Meta-ultramafic; Grey, medium to coarse grained, schistose, hard and compact rock. Talc-tremolite schist; Grey, fine to coarse-grained rock with soapy feeling and radiating crystal. Andalusite schist; Greyish white, medium to coarse grained, well foliated rock. Tremolite schist; Greenish grey, medium grained, radiating, hard and compact rock. Quartz -mica schist; Dirty white to silvery white, medium grained rock. (G.S.I. 2005)
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Geology and Structure of the block: NA

6. Objective of the proposed exploration programme

Demarcation and Assessment of Iron Ore deposits

As per available literature the exploration area seems to be potential for iron ore. To assess the grade and quantity of resources, exploration (detailed geological mapping, pitting and drilling) is proposed in this area and the proposed future course of exploration program should be of G-4 category (Evidence of mineral content) Rules 2015 .

7. Proposed scheme of Exploration:

7.1. In accordance to the objectives set for the block, the exploration shall be carried out according to scheme of exploration formulated in order to achieve the objectives. The details of different activities to be carried out are given below:-

7.2. Geological mapping: Geological mapping will be done on 1:12,500 scale. Rock types, their contact, structural features will be marked. Surface manifestations of available mineralized zones along with their surface disposition will be marked on map. Samples of various litho-units for Petrological studies from ore bodies will be taken during the course of geological mapping.

8. Surveying:

The block boundary will be surveyed by total station in WGS-84 datum for demarcation of block boundary points. Survey party will be associated with bedrock sample collection by taking up the points and plotting its location on map for proper interpretation of the sample data. Survey party will also be associated with Geological Mapping will be observed during Geological mapping and

the litho-contacts will be plotted for finalization of Geological map on 1:4000 scale. During drilling borehole fixation and determination of reduced level and co-ordinates of the boreholes will be undertaken. If mineralized zones are identified, contouring of the surrounding areas of ore bodies would be done on 2m contour intervals along with survey of surface features

The iron ore block comes under Matala reserve forest of Narayanpur district. The block of Iron ore have been demarcated on the map and chemical analysis result of the samples. Total eleven nos. of surface samples collected in vicinity area and within the block during the courses of survey. Total 5 Nos. of boreholes are being proposed within the block in square grid pattern <800 m interval in total 100 sq km area. After detailed geological mapping actual Iron Ore body would be demarcated. After demarcating actual iron ore body the prospecting plan and borehole plan shall be modified.

9. Core Drilling:

- 9.1. The Bailadila group of rocks in Iron Ore are represented by BMQ/BHQ. After the analysis of surface samples, number of continuous or detached mineralized zones may come up on map.
- 9.2. Drill Core Logging: The drill core will be logged for rock types, structural features, textures, intersection of ore zones and type of mineralization an occurrence of various core minerals.
- 9.3. Drill Core Sampling: During the geological logging of drill core, mineralized zones will be marked based on concentration and Lithological variation. All iron ore samples (primary) will be analyzed.
- 9.4. Petrological & Mineralogical Studies will be done as per requirement.

10. Quantum of Work Proposed:

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Iron Ore in Narayanpur (Notified area) of Narayanpur District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←					→								
Drilling		←							→					
Sample preparation		←								→				
Geologist party days for drilling sampling and report work	←									→				
Analytical work Drill core sample			←									→		
Camp winding										←		→		
Geological report										←			→	

Table No. 2: proposed quantum of work in (notified area) Narayanpur district, Chhattisgarh

S.NO.	ITEM OF WORK	QUANTUM OF WORK
1	Geological mapping, 1 :4000 scale	100 Km ²
2	Drilling (coring)	500m (05 BH)
3	Geological work	
	a) Core logging	500 m
	b) Core sampling	500 Nos.
4	Laboratory studies	
5	Core samples with (silica Iron Alumina. Titanium vanadium & Gallium,)	-
6	Physical studies	
	a) Petrological studies	20Nos
	b) Mineralogical studies	20 Nos.
	c) Report preparation As per Evidence of Mineral Content Rule 2015	-

11. Justification:

- i) In view of the mineral (Evidence of Mineral Content) Rules, 2015, DGM Chhattisgarh has identified this block for exploration of iron ore to take up the work under NMET funding.
- ii) In the proposed study area, there are various mineralized zones, which are presented by formational contact, ferruginous capping and old workings/pits available as guide for localization of the presence of ore bodies. The exploration will be helpful in estimation reconnaissance resources of Iron ore in the block area.
- iii) In case the results of the reconnaissance survey are positive, it will help in planning of general exploration programme, which in turn will facilitate the state govt. for auctioning of block.

New Delhi, the 21st June, 2018

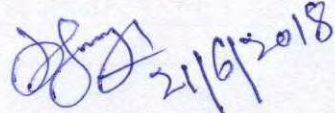
OFFICE MEMORANDUM

Subject: Approval of mineral exploration projects in 14 blocks of DMG Chhattisgarh.

On the recommendation of Technical-cum-Cost Committee (TCC) of NMET, the Executive Committee in its 8th meeting, held on 12th June, 2018 approved mineral exploration projects in 14 blocks of DMG Chhattisgarh. The list of projects is enclosed as **Annexure-I**.

2. These 14 mineral exploration projects will be funded by NMET as per the costing recommended by the TCC and approved by the Executive Committee. The Implementing Agency shall complete the same as per the approved cost estimates and time schedule, enclosed in **Annexure II to XV**.

3. The work execution shall be monitored by DMG Chhattisgarh. The TCC, NMET shall review the progress of projects and provide update every six months to the Executive Committee. The Implementing Agencies shall submit progress on monthly basis to NMET.


(Pradeep Singh)
Director, NMET

To
The Director,
Directorate of Geology and Mining
Govt. of Chhattisgarh,
Indravati Bhawan, Block No-4, 2nd floor,
Naya Raipur- 492002.

Copy to:

1. Sh. D. Mohanraj, ADG, NM-II& Chairman, NMET TCC, Geological Survey of India, Seminary Hills, Nagpur- 440 006.
2. The Member Secretary, NMET TCC, MECL, Dr. Babasaheb Ambedkar Bhawan, Seminary Hills, Nagpur- 440 006.

**List of mineral blocks of DMG Chhattisgarh approved in 8th Executive Committee on
12.06.2018**

Sl. No.	Block Name	Commodity	Stage	Duration	Estimated Cost (Rs. in Lakh)
1	Dumarguda Block, Dist. Surguja	Bauxite	G-3	10 months	65.51
2	Murtadand Block, Dist. Surguja	Bauxite	G-3	8 months	47.58
3	Dandkesra North Area Mainpat Dist. Surguja	Bauxite	G-3	8 months	37.98
4	Parpatia Area Mainpat Dist. Surguja	Bauxite	G-3	10 months	177.24
5	Khamardih-Gatadih Area, Distt. Raigarh	Limestone	G-3	6 months	34.97
6	Khairha Area, Distt. Raigarh	Limestone	G-3	6 months	36.82
7	North Bailadila Area, Dist.-Raigarh	Iron Ore	G-4	12 months	91.48
8	Hurtarai Area Block, Dist.-Kanker	Iron Ore	G-4	12 months	90.77
9	Rowghat Block, Dist. Kanker	Iron Ore	G-4	12 months	90.77
10	Rajhara Block, Dist. Balod	Iron Ore	G-4	12 months	91.48
11	Salhewara Block, Dist. Rajnandgaon	Iron Ore	G-4	12 months	91.48
12	Narayanapur Block, Dist. Narayanapur	Iron Ore	G-4	12 months	73.15
13	Notified Area Block, Dist. Kanker	Iron Ore	G-4	12 months	63.55
14	Aturbeda Area Block, Dist. Kanker	Iron Ore	G-4	12 months	79.19
				Total	1071.97

Annexure-III

COST ESTIMATE FOR PRELIMINARY EXPLORATION FOR BAUXITE IN DUMARGUDA AREA (G-3) DIST. SURGUJA, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base Rate	Financial Year (2018-19)			Total	
				Esc. Rate	Qty.	Amount	Qty.	Amount
			1.4.90	(Rs)		(Rs)		(Rs)
A	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	490	3322200	490	3322200
2	Road Making (Flat Terrain)	Km	7800	18563		3322200		3322200
	Sub Total A							
B	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	10	78020	10	78020
3	Core Sampling Party days(2 parties)	day	525	2809	100	280900	100	280900
	Sub-Total B					358920		358920
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	588	1398264	588	1398264
	ii) Analysis of REE	Nos	-	7681	10	76810	10	76810
	iii) for Composit Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	iv) for Check Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	Sub-Total C					1398264		1750922
	Total A+B+C					5079384		5432042
D	Report Writing	Nos	120000	120000	1	120000	1	120000
	Sub Total					120000		120000
	TOTAL A to D					5199384		5552042
E	GST 18%							999358
	Grand Total : with GST 18%							6551410
								Total IN Lacs
								65.51
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	***Nityanad Committee Rates with actual escalation as per RBI index as on 31.3 2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committee of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. Ratan

B.P. Ratan
member secretary
TCC, NMET

5.8 QUANTUM OF WORK PROPOSED

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Dumarguda block, Mainpat plateau distt. Surguja										
Item of work	1	2	3	4	5	6	7	8	9	10
Geological mapping	↔									
Bed rock sampling	↔									
Surveying (one party)	←	→								
Drilling		←	→							
Survey party for contouring and surface feature	←			→						
Sample preparation		←	→							
Geologist party days for drilling sampling and report work	←					→				
Analytical work Drill core sample		←					→			
Camp winding							←	→		
Geological report								←	→	

Ratun
BP. Ratun

Annexure-III

COST ESTIMATE FOR PRELIMINARY EXPLORATION FOR BAUXITE IN MURTADAND AREA (G-3) DIST. SURGUJA, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	290	1966200	290	1966200
2	Road Making (Flat Terrain)	Km	7800	18563				
	Sub Total A					1966200		1966200
B	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840		0	0	0
2	Geologist Party days (1 party)	day	1541	7802	10	78020	10	78020
3	Core Sampling Party days(2 parties)	day	525	2809	63	176967	63	176967
	Sub-Total B					254987		254987
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	588	1398264	588	1398264
	ii) Analysis of REE	Nos	-	7681	10	76810	10	76810
	iii) for Composit Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	iv) for Check Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	Sub-Total C					1398264		1750922
	Total A+B+C					3619451		3972109
D	Report Writing	Nos	60000	60000	1	60000	1	60000
	Sub Total					60000		60000
	TOTAL A to D					3679451		4032109
E	GST 18%							725780
	Grand Total : with GST 18%							4757889
								Total IN Lacs
								47.58
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committee of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. RaturiB.P. Raturi
member secretary
TCC, NMET

5.6 QUANTUM OF WORK PROPOSED

Table 2: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Murtadand block, Mainpat plateau distt. Surguja										
Item of work	1	2	3	4	5	6	7	8	9	10
Geological mapping	↔									
Bed rock sampling	↔									
Surveying (one party)	←	→								
Drilling		←	→							
Survey party for contouring and surface feature	←	→								
Sample preparation		←	→							
Geologist party days for drilling sampling and report work	←	→								
Analytical work Drill core sample		←	→							
Camp winding										
Geological report					←	→				

B.P. Ratan

B.P. Ratan

Annexure-III

COST ESTIMATE FOR PRELIMINARY EXPLORATION FOR BAUXITE IN DANDKESRA NORTH AREA MAINPAT (G-3) DIST. SURGUJA, CHATTISHGARH								
SL. No.	Item of Work	Unit	Financial Year (2018-19)				Total	
			Base Rate	Esc. Rate	Qty.	Amount	Qty.	Amount
			1.4.90	(Rs)		(Rs)		(Rs)
A	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	180	1220400	180	1220400
2	Road Making (Flat Terrain)	Km	7800	18563		1220400		1220400
	Sub Total A							
B	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	10	78020	10	78020
3	Core Sampling Party days(2 parties)	day	525	2809	39	109551	39	109551
	Sub-Total B					187571		187571
C	LABORATORY STUDIES							
	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 5 radicals (TiO ₂ , Ga,V,SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	588	1398264	588	1398264
	ii) Analysis of REE	Nos	-	7681	10	76810	10	76810
	iii) for Composit Samples 5 radicals (TiO ₂ , Ga,V,SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	iv) for Check Samples 5 radicals (TiO ₂ , Ga,V,SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	Sub-Total C					1398264		1750922
	Total A+B+C					2806235		3158893
D	Report Writing	Nos	60000	60000	1	60000	1	60000
	Sub Total					60000		60000
	TOTAL A to D					2866235		3218893
E	GST 18%							579401
	Grand Total : with GST 18%							3798294
								Total IN Lacs
								37.98
Note:								
1	Revised Rates of Promotional Work done by MEC, on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B. P. Raturi
B.P. Raturi
Member Secretary
TCC, NMBT

5.9 QUANTUM OF WORK PROPOSED

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Dandkesra North, Mainpat plateau distt. Surguja										
Item of work	1	2	3	4	5	6	7	8	9	10
Geological mapping	←→									
Bed rock sampling	←→									
Surveying (one party)	←	→								
Drilling		←	→							
Survey party for contouring and surface feature	←	→								
Sample preparation		←	→							
Geologist party days for drilling sampling and report work	←	→								
Analytical work Drill core sample		←	→							
Camp winding					←	→				
Geological report					←	→				

B. P. Rautan

B. P. Rautan

Annexure-III

COST ESTIMATE FOR PRELIMINARY EXPLORATION FOR BAUXITE IN PARPATIA AREA MAINPAT (G-3) DIST. SURGUJA, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	DRILLING							
1	Surface Drilling (2 Rigs)	m	1714	6780	1750	11865000	1750	11865000
2	Road Making (Flat Terrain)	Km	7800	18563				
	Sub Total A					11865000		11865000
B	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	20	156040	20	156040
3	Core Sampling Party days(2 parties)	day	525	2809	382	1073038	382	1073038
	Sub-Total B					1229078		1229078
C	LABORATORY STUDIES							
	Chemical Analysis							
1	Primary + Check Samples							
	(i) for Primary Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	588	1398264	588	1398264
	(ii) Analysis of REE	Nos		7681	10	76810	10	76810
	(iii) for Composit Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	(iv) for Check Samples 5 radicals (TiO ₂ , Ga, V, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	414 (76x4+110)	2378	58	137924	58	137924
	Sub-Total C					1398264		1750922
	Total A+B+C					14492342		14845000
D	Report Writing	Nos	175000	175000	1	175000	1	175000
	Sub Total					175000		175000
	TOTAL A to D					14667342		15020000
E	GST 18%							2703600
	Grand Total : with GST 18%							17723600
						Total IN Lacs		177.24
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule of Rates.							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GST as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. RaturiB.P. Raturi
member Secretary
TCC, NMET

5.9 QUANTUM OF WORK PROPOSED

Table No. 1: The detail of quantum of proposed work is given below:-

Time Schedule (in month) For exploration programme in Parpatia block of Mainpat plateau Surguja district												
Item of work	1	2	3	4	5	6	7	8	9	10	11	12
Geological mapping	↔											
Bed rock sampling	↔											
Surveying (one party)	←	→										
Drilling		←	→									
Survey party for contouring and surface feature	←	→										
Sample preparation		←	→									
Geologist party days for drilling sampling and report work	←	→										
Analytical work Drill core sample			←	→								
Camp winding								←	→			
Geological report						←	→					

B. P. Ratan

B. P. Ratan

Annexure-III

COST ESTIMATE FOR PRELIMINARY EXPLORATION OF LIMESTONE IN KHAMARDIH-GATADIH AREA (G-3) DIST. RAIGARH, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base Rate	Financial Year (2018-19)			Total	
				Esc. Rate	Qty.	Amount	Qty.	Amount
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK					0	0	0
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	50	390100	50	390100
3	Core Sampling Party days(2 parties)	day	525	2809	44	123596	44	123596
	Sub-Total A					513696		513696
B	DRILLING							
1	Surface Drilling (2 Rigs)	m	1714	6780	240	1627200	240	1627200
2	Road Making (Flat Terrain)	Km	7800	18563		0	0	0
	Sub Total B					1627200		1627200
C	LABORATORY STUDIES							
	Chemical Analysis							
1	Primary - Check Samples							
	i) for 6 radicals (CaO, MgO, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	490 (76x5+110)	2580	240	619200	240	619200
	ii) Composite Samples (10%) (CaO, MgO, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , P ₂ O ₅ & LOI)	Nos	566 (76x6+110)	2982	24	71568	24	71568
	iii) Check Samples (10%)	Nos	566 (76x6+110)	2982	24	71568	24	71568
	Sub-Total C					619200		762336
	Total A+B+C					2760096		2903232
D	Report Writing	Nos	60000	60000	1	60000	1	60000
	Sub Total					60000		60000
	TOTAL A to D					2820096		2963232
E	GST 18%							533382
	Grand Total : with GST 18%							3496614
							Total IN Lacs	34.97
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphonite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & 1st meeting of Executive Committee of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. Rautan
B.P. Rautan

Annexure-III

COST ESTIMATE FOR PRELIMINARY EXPLORATION OF LIMESTONE IN KHAIRHA AREA (G-3) DIST. RAIGARH, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840		0	0	0
2	Geologist Party days (1 party)	day	1541	7802	30	234060	30	234060
3	Core Sampling Party days(2 parties)	day	525	2809	49	137641	49	137641
	Sub-Total A					371701		371701
B	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	270	1830600	270	1830600
2	Road Making (Flat Terrain)	Km	7800	18563		0	0	0
	Sub Total B					1830600		1830600
C	LABORATORY STUDIES							
	Chemical Analysis							
1	Primary + Check Samples							
	i) for 6 radicals (CaO, MgO, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	490 (76x5+110)	2580	270	696600	270	696600
	ii) Composite Samples (10%) (CaO, MgO, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , P ₂ O ₅ & LOI)	Nos	566 (76x6+110)	2982	27	80514	27	80514
	iii) Check Samples (10%) (CaO, MgO, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , P ₂ O ₅ & LOI)	Nos	566 (76x6+110)	2982	27	80514	27	80514
	Sub-Total C					696600		857628
	Total A+B+C					2898901		3059929
D	Report Writing	Nos	60000	60000	1	60000	1	60000
	Sub Total					60000		60000
						0		0
	TOTAL A to D					2958901		3119929
E	GST 18%							561587
	Grand Total : with GST 18%							3681516
								Total IN Lacs
								36.82
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphonite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GST as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. Ratur
member secretary, TCC NMET

Table No.3: The detail of quantum of work proposed:-

Time Schedule (in month) For exploration programme in Khairha block, distt. Raigarh												
Item of work	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Geological mapping	←											
Bed rock sampling	←											
Surveying (one party)	←	→										
Drilling	←	→										
Survey party for contouring and surface feature		←	→									
Sample preparation	←	→										
Geologist party days for drilling sampling	←	→										
Analytical work	←	→										
Camp binding			←	→								
Geological report	←			→								

B.P. Pattnaik
B.P. Pattnaik

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE IN NORTH BAILADILA AREA (G-4) DIST. RAIGARH, CHATTISHGARH								
Time Schedule								
SL. No.	Item of Work	Unit	Base Rate	Financial Year (2018-19)			Total	
				Esc. Rate (Rs)	Qty.	Amount (Rs)	Qty.	Amount (Rs)
A GEOLOGICAL WORK								
1	Survey Party Days (1 party)	day	1180	5840		0	0	0
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	500	300000	500	300000
4	Reconnaissance Geological							
Sub-Total A						1080200		1080200
B DRILLING								
1	Drilling iron	m.		9947	500	4973500	500	4973500
2	Road Making (Flat Terrain)	Km	7800	18563		0	0	0
Sub Total B						4973500		4973500
C LABORATORY STUDIES								
a Chemical Analysis								
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ , P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ , P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ , P%, S%.)	Nos	490 (76x5+110)	2580	50	129000	50	129000
Petrographic Studies								
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
Sub-Total C								1578900
Total A+B+C						6053700		7632690
D	Report Writing	Nos	60000	120000	1	120000	1	120000
Sub Total								120000
						0		0
TOTAL A to D						6173700		7752690
E	GST 18%							1395484
Grand Total : with GST 18%								9148174
						Total IN Lacs		91.48
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule of							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

Balun
B. P. Rauturi

10. Quantum of Work Proposed:

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in North Bailadila area of Dantewada District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←													
Drilling		←												
Sample preparation		←												
Geologist party days for drilling sampling and report work	←													
Analytical work Drill core sample			←											
Camp winding										←				
Geological report										←				

BP-Railin
BP-Railin

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE IN HURTARAI AREA (G-4) DIST. KANKER, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day						
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	400	240000	400	240000
4	Reconnaissance Geological							
	Sub-Total A					1020200		1020200
B	DRILLING							
1	Drilling iron	m.		9947	500	4973500	500	4973500
2	Road Making (Flat Terrain)	Km						
	Sub Total B					4973500		4973500
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ %, P%, S%,)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C							1578990
	Total A+B+C					5993700		7572690
D	Report Writing	Nos	60000	120000		120000	0	120000
	Sub Total					120000		120000
	TOTAL A to D					6113700		7692690
E	GST 18%							1384684
	Grand Total : with GST 18%							9077374
							Total IN Lacs	90.77
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

Barton

B. P. Barton

Annexure - IX/2

10. Quantum of Work Proposed

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Hurtarai area of Kanker District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←						→							
Drilling		←							→					
Sample preparation		←							→					
Geologist party days for drilling sampling and report work	←								→					
Analytical work Drill core sample			←									→		
Camp winding										←		→		
Geological report										←		→		

B.P. Ratan

B.P. Ratan

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE IN ROWGHAT (G-4) DIST. KANKER, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
2	Core Sampling Party days(2 parties)	day	525	600	400	240000	400	240000
	Sub-Total A					1020200		1020200
B	DRILLING							
1	Drilling iron	m.		9947	500	4973500	500	4973500
	Sub Total B					4973500		4973500
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ %, P%, S%,)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C							
	Total A+B+C					5993700		7572690
D	Report Writing	Nos	60000	120000	1	120000	1	120000
	Sub Total					120000		120000
	TOTAL A to D					6113700		7692690
E	GST 18%							1384684
	Grand Total : with GST 18%							9077374
						Total IN Lacs		90.77
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(l) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

BSP. Baturin

10. Quantum of Work Proposed

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Rowghat (Notified area) of Kanker District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping		←					→							
Drilling		←							→					
Sample preparation		←							→					
Geologist party days for drilling sampling and report work	←								→					
Analytical work Drill core sample			←									→		
Camp winding										←		→		
Geological report										←		→		

Ratum

B.P. Ratum

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE IN Rajhara (G-4) DIST. BALOD, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	500	300000	500	300000
4	Reconnaissance Geological							
	Sub-Total A					1080200		1080200
B	DRILLING							
1	Drilling iron	m.		9947	500	4973500	500	4973500
2	Road Making (Flat Terrain)	Km	7800	18563				
	Sub Total B					4973500		4973500
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ %, P%, S%.)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C							1578990
	Total A+B+C					6053700		7632690
D	Report Writing	Nos	60000	120000	1	120000	1	120000
	Sub Total					120000		120000
	TOTAL A to D					6173700		7752690
E	GST 18%							1395484
	Grand Total : with GST 18%							9148174
						Total IN Lacs		91.48
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

Balrao
B.P. Rautan
B.P. Rautan
 member secretary
 TCC, NMET

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Dallirajhara area of Balod District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←	→												
Drilling		←	→	→	→	→	→	→	→					
Sample preparation		←	→	→	→	→	→	→	→					
Geologist party days for drilling sampling and report work	←	→							→					
Analytical work Drill core sample			←	→	→	→	→	→	→	→	→	→		
Camp winding										←	→			
Geological report										←	→	→		

Table No. 2: proposed quantum of work in Dallirajhara area district Balod, Chhattisgarh

B.P. Rath

B.P. Rath

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE IN SALHEWARA (G-4) DIST. RAJNANDGAON, CHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840		0	0	0
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	500	300000	500	300000
4	Reconnaissance Geological							
	Sub-Total A					1080200		1080200
B	DRILLING							
1	Drilling iron	m.		9947	500	4973500	500	4973500
2	Road Making (Flat Terrain)	Km	7800	18563		0	0	0
	Sub Total B					4973500		4973500
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%.)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C							1578990
	Total A+B+C					6053700		7632690
D	Report Writing	Nos	60000	120000	1	120000	1	120000
	Sub Total					120000		120000
	TOTAL A to D					6173700		7752690
E	GST 18%							1395484
	Grand Total : with GST 18%							9148174
						Total IN Lacs		91.48
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. Rautan
B.P. Rautan

8. Quantum of Work Proposed

The details of Quantum of proposed work are given below:-

Table No. 1: The detail of quantum of proposed work is given below:-

Time Schedule (in month) Preliminary Survey from Iron ore Salhewara area of Rajnandgaon District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←													
Drilling		←												
Sample preparation		←												
Geologist party days for drilling sampling and report work	←													
Analytical work Drill core sample			←											
Camp winding														
Geological report														

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B.P. Ratur

Annexure - XIII/1

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE NARAYANAPUR (G-4) DIST. NARAYANAPUR, CHATTISHGARH								
SL. No.	Item of Work	Unit	Financial Year (2018-19)				Total	
			Base Rate	Esc. Rate	Qty.	Amount	Qty	Amount
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840		0	0	0
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	550	330000	550	330000
						0	0	0
	Sub-Total A					1110200		1110200
B	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	500	3390000	500	3390000
2	Road Making (Flat Terrain)	Km	7800	18563		0	0	0
								0
	Sub Total B					3390000		3390000
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ , P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ , P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ , P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C							1578990
	Total A+B+C					4500200		6079190
D	Report Writing	Nos	60000	120000	1	120000	1	120000
	Sub Total					120000		120000
	TOTAL A to D							6199190
E	GST 18%							1115854
	Grand Total : with GST 18%							7315044
						Total IN Lacs		73.15
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. Ratan
B.P. Ratan

10. Quantum of Work Proposed:

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Iron Ore in Narayanpur (Notified area) of Narayanpur District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←													
Drilling		←												
Sample preparation		←												
Geologist party days for drilling sampling and report work	←													
Analytical work Drill core sample			←											
Camp winding														
Geological report										←				
										←				

NMET/Iron/Narayanpur/Nagpur/21.05.2018

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Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE NOTIFIED AREA (G-4) DIST. KANKER, CHHATTISHGARH								
SL. No.	Item of Work	Unit	Base		Financial Year (2018-19)		Total	
			Rate	Esc. Rate	Qty.	Amount	Qty	Amount
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	400	240000	400	240000
						0	0	0
	Sub-Total A					1020200		1020200
B	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780	400	2712000	400	2712000
2	Road Making (Flat Terrain)	Km	7800	18563				
	Sub Total B					2712000		2712000
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for Primary Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ %, P%, S%,)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C					1290000		1578990
	Total A+B+C					5022200		5311190
D	Report Writing	Nos	60000	74644	1	74644	1	74644
	Sub Total					74644		74644
	TOTAL A to D					5096844		5385834
E	GST 18%							969450
	Grand Total : with GST 18%							6355284
						Total IN Lacs		63.55
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(i) /2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

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B.P. Batum

10. Quantum of Work Proposed

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Iron Ore in Atur bedda area of Kanker District Notified														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping		←					→							
Drilling			←							→				
Sample preparation			←							→				
Geologist party days for drilling sampling and report work		←								→				
Analytical work Drill core sample				←									→	
Camp winding										←		→		
Geological report										←			→	

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B.P. Batum

Annexure-III

COST ESTIMATE FOR RECONNAISSANCE SURVEY FOR IRON ORE ATURBEDA AREA (G-4) DIST. KANKER, CHHATTISHGARH								
SL. No.	Item of Work	Unit	Base	Financial Year (2018-19)			Total	
				Rate	Esc. Rate	Qty.	Amount	Qty.
			1.4.90	(Rs)		(Rs)		(Rs)
A	GEOLOGICAL WORK							
1	Survey Party Days (1 party)	day	1180	5840				
2	Geologist Party days (1 party)	day	1541	7802	100	780200	100	780200
3	Core Sampling Party days(2 parties)	day	525	600	400	240000	400	240000
	Sub-Total A					1020200		1020200
B	DRILLING							
1	Surface Drilling (2 Rigs)	m.	1714	6780				
2	Road Making (Flat Terrain)	Km	7800	18563				
3	Drilling iron	m.		9947	400	3978800	400	3978800
	Sub Total B					3978800		3978800
C	LABORATORY STUDIES							
a	Chemical Analysis							
1	Primary + Check Samples							
	i) for 6 radicals (CaO, MgO, SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ & LOI)	Nos	490 (76x5+110)	2580	500	1290000	500	1290000
	ii) for Composit Samples 6 radicals(Fe%, Mn%, SiO ₂ %, Al ₂ O ₃ %, P%, S%)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	iii) for Check Samples 6 radicals(Fe%, Mn% SiO ₂ %, Al ₂ O ₃ %, P%, S%.)	Nos	490 (76x5+110)	2580	50	129000	50	129000
	Petrographic Studies							
	Thin Section Preparations	Nos	100	538	10	5380	10	5380
	Polished Section Preparation	Nos	100	538	10	5380	10	5380
	Minerographic Studies	Nos	364	2023	10	20230	10	20230
	Sub-Total C					1290000		1578990
	Total A+B+C					6289000		6577990
D	Report Writing	Nos	60000	131559.8	1	131559.8	1	131560
	Sub Total					131560		131560
	TOTAL A to D					6420560		6709550
E	GST 18%							1207719
	Grand Total : with GST 18%							7917269
						Total IN Lacs		79.17
Note:								
1	Revised Rates of Promotional Work done by MECL on behalf of Govt. of India Vide letter No. 37(I)/2006-M.I. dated- 02/07/2014 and based on actual escalation as per RBI indices as on 31-03-2017 and the same has been considered for subsequent year.							
2	Phosphorite rates have been considered as there is no rates for Limestone in Revised Rates of Promotional Work of MoM Schedule							
3	**Nityanad Committee Rates with actual escalation as per RBI index as on 31.3.2017 and the same for subsequent year.							
4	*** As approved in the 12th meeting of Technical Committee & th meeting of Executive Committe of NMET.							
5	**** Rate has taken from Schedule of Charges of differen activities of GSI as on 2014-15 and 40% escalation on the same has been considered for FY 2018-19.							

Mineral Exploration and evaluation 18%(SAC Code: 998343)

B.P. Raturi

B.P. Raturi

10. Quantum of Work Proposed

Table No. 1: The detail of quantum of proposed work is given below:-

Time Shedule (in month) For exploration programme in Iron Ore in Aturbeda area of Kanker District														
Item of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geological mapping	←													
Drilling		←												
Sample preparation		←												
Geologist party days for drilling sampling and report work	←													
Analytical work Drill core sample			←											
Camp winding										←				
Geological report										←				

Barton

B.P. Barton