

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

**Review and updation of Mining Plan REPORT**

**Bangalore regional office**

**Mine file No :** KNT/BLR/FE/416/BNG

**Mine code :** 30KAR03125

- (i) Name of the Inspecting : **S47** ) **DR. Sudhakara T.L**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : A.Sreekantha Reddy, Mines Manager, A.Venkateswar Red  
Official with  
Designation
- (iv) Date of Inspection : 29/01/2022
- (v) Prev.inspection date : 11/03/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **NEB RANGE(ML 2150)54.63**
- (b) **Registration NO.** : **IBM/13651/2012**
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address :  
State : KARNATAKA  
District : BELLARY  
Village : NEB RANGE  
Taluka : SANDUR  
Post office :  
Pin Code :  
FAX No. : 08392-271156 (F)  
E-mail : hrgtiom@gmail.com  
Phone : 08392-279946, 8453630795, !
- (f) Police Station : SANDUR
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for : SRI.H.G.RANGAN GOUD,  
correspondance 15/142, NEHARU CO-OPERATIVE COLONY  
HOSPET, BELLARY - 583201
3. (a) Lease Number : KAR0336
- (b) Lease area : 54.64
- (c) Period of lease : 20
- (d) Date of Expiry : 04/08/2022
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : H.G.RANGAN GOUD  
 #15/142, NEHRU CO-OP  
 COLONY, HOSPET, BELLARY  
 KARNATAKA  
 Phone:08394-429647,428505  
 FAX :

Owner : H.G.RANGAN GOUD  
 #15/85, NEHRU CO-OP COLONY,  
 HOSPET, BELLARY KARNATAKA  
 Phone: 08394-54455,585  
 FAX :

## Geologist

Name : SANTHOSH REDDY,Full Time  
 Qualification : M.Sc. Geology  
 Appointment/ : 01/02/2018  
 Termination date

## Manager

Name : A.SHRIKANT REDDY  
 Qualification : DIP.IN MINING ENGIN  
 Appointment/ : 25/02/2017  
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	07/03/1990
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	16/01/2003
		Modif.of approved Mining Plan	16/03/2006
		Mining Scheme rule 12 MCDR1988	12/11/2008
		Mining Scheme rule 12 MCDR1988	16/04/2014
		MP review under 17(1) MCR 2016	31/03/2017
		Modif.of approved Mining Plan	17/05/2019
		Modif.approved Mining Scheme	23/07/2021

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	3 No's of Trail pits are proposed and no drilling proposed.	Trail pits - 03 and 04 No's of RC drill are done in the year 2020-21	On the date of inspection 6 No's of trail pits & 16 No's of RC boreholes were drilled.
1b	Exploration over lease area for geological axis 1 or 2	G1 & G4	G1- 11.57 Ha G2- Nil G3- Nil G4- 34.63 Ha	Out of 46.2Ha, FC granted for 36.50Ha. potentially mineralized area is about 11.57Ha, which is explored under G1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	SYT Earth movers, Bellary, Expenditure incurred on exploration is Rs 140,000/- for the year 2020-21	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	G4- 26.24 Ha	Lessee has explored mineralized area in G1 level, non-mineralized area to be explored by pitting/trenching/scout drilling to to know continuity of any mineralized bands.
1e	Balance reserve as on 01/04/20	3.362 million tons (111) as on 01/04/2021	3.362 million tons (111) as on 01/04/2021	As per approved Mining Plan dated 23/07/2021. The reserves includes hematatic iron ore, HSI0 & float ore.

1f	General remarks of inspecting officers on geology, exploration etc	Out of 46.2Ha, FC granted for 36.50Ha. Lessee has explored mineralized area in G1 level, non-mineralized area to be explored by pitting/trenching/scout drilling to know continuity of any mineralized bands.
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## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development proposed: N- 1675280 - 1675430 E- 665030 - 665120 in between section line 'CC' to DD'	Development done: E 665006 to E 665138 & N 1675437 to N 1675280 in between section line 'CC' to DD'	Development within the lease area with minor variation in the proposed location.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No Separate benches are proposed for overburden & Mineral,	All the benches contain ore & OB	In ore 02 bench , OB bench - 2 bench
2c	Stripping ratio or ore to OB ratio	1:0.61 Ore:114,000 OB: 32650	1:0.29 Ore : 114000 Waste : 32501	Ore to OB ratio is near to the proposal. However, in proposal OB ratio wrongly specified
2d	Quantity of topsoil generation in m3	No proposals	Nil	No generation of top soil
2e	Quantity of overburden generation in m3	32650 Tonnes	32501 Tonnes	As per the production & dispatch register.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development was carried out within the proposed grid location. Ore to OB quantity is maintained as proposed.
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**Exploitation:**

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	Approximate dimensions of the pit is (225 X 195 X 60.3m)
3b	Quantity of ROM mineral production proposed	Reef 114000 (Tons) in tones	Reef 114000 (Tons) in tones	No Change
3c	Recovery of sailable/usable mineral from ROM production	95 % In reef	95 % In reef	No Change
3d	Quantity of mineral reject generation	27300 tonnes Proposed Location: E 664926 to 664967 & N 1675578 to 1675486	26961 tonnes	Actual Location of Storage of mineral reject E 664933 to 664999 & N 1675540 to 1675407
3e	Grade of mineral rejects generation and threshold value declared.	--	BHJ, SILICEOUS ORE 35%	Reported in Annual Return
3f	Quantity of sub grade mineral generation.	No proposal	Nil	No Sub grade mineral generated
3g	Grade of sub grade mineral generation	No Proposal	Not applicable	--
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method proposed for segregation from ROM	Processing ROM by dry crushing & screening plant	Screen capacity 200 tones per hour.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals	No beneficiation study carried out	Dry crushing & screening
3j	Provision of drilling and blasting in mineral benches	Provision is made for Drilling & Blasting in mineral benches	Drilling & Blasting is carried out by 115m drill dia	Spacing 3.5mtrs Burden 2.5mtrs depth 7mtrs & 83mm slurry cartridge, solar cord & ordinary detonators are used for blasting
3k	Provision of mining machineries in mineral benches	Yes , provisions of machineries Excavators -2 Wheel loaders- 2 Tippers - 3 Wagon drilling-1 Mobile crushing-1 Water Tanker - 2 Crusher - 1	Excavators -2(1.1CUM) Wheel loaders-2 (1.6Cum) Tippers - 3 (16 tones) Wagon drilling-1 (115 MM dia) Water Tanker -2 (8000 liters) Crusher -1 (200TPH)	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of bench proposed is 6m & width more than the bench height.	Bench Height and width is maintained as per the approval.	Bench Height 6mtrs, width 9mtrs
3m	Total area covered under excavation/pits	5.42 Ha by the end of plan period	5.18 Ha by the end of 2019-20	--
3n	Ore to OB ratio for the pit/mine during the year.	Ore:114,000 OB: 32650	Ore : 114000 Waste : 32501	No significant change

3o	Total area put in use under different heads at the end of year	Area under Mining-5.42Ha Waste dump: 1.64Ha, Mineral Storage- 0.40Ha, Infrastructure : 0.17Ha, Roads-0.26Ha, Mineral Sepaeration Plant: 0.40Ha, Green Belt- 2.16Ha by the end of plan period.	Area under current (o/c) working - 5.18 Ha, used for waste disposal - 1.23 Ha, Mineral storage - 0.40 Ha, Occupied by Plant, buildings, residential, welfare buildings & roads - 0.81 Ha, Other Purpose (Mineral Storage, Green Belt)-0.43Ha by the end of 2019-20	
3p	Production of ROM mineral during the last five year period as applicable	2016-17:1,14,000 2017-18:1,14,000 2018-19:1,14,000 2019-20:1,14,000 2020-21:1,14,000 ( in tones)	2016-17:29000 2017-18:114000 2018-19:114000 2019-20:1,14,000 2020-21:1,14,000 ( in tones)	Mining operations resumption on 22/02/2017, actual production is within the proposed limits.
3q	General remarks of inspecting officers on method of mining etc.			Mining is carriedout by drilling and blasting. Bench height and width maintained as proposed.

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping for OB & mineral reject proposed.	Separate dumping is carried for dumping & stacking of OB & mineral reject.	Separate dumping is carried out as proposed

4b	Location of topsoil, OB and mineral reject dumps	Topsoil : Nil, OB: location is Waste N-1675420-1675360 E-664940-664980 Mineral Rejects N-1675530-16755710 E-664925-664965 In between section line 'AA' to 'BB'	Topsoil : Nil, OB: location is Waste E 664936 to E 665085 & N 1675453 to N 1675264 Mineral Rejects E 664933 to 664999 & N 1675540 to 1675407In between section line 'AA' to 'BB'	
4c	Number of dumps within lease area and outside of lease area	WML-1 OML - Nil	WML-1 OML - Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are located at outside the ultimate pit limit	Dumping is done at distance of 40 mtrs away from the ultimate pit limit area	
4e	Number of active and alive dumps.	One active & alive dumps	One active & alive dumps	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	0.21 Ha part of active dump proposed	0.21 Ha of dump stabilized	--
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dumps	103 Mtrs of Retaining wall & 103 Mtrs Garland drain proposed including OB & Mineral reject dump	138 Mtrs of Retaining wall & 140 Mtrs Garland drain constructed.	Proposed 73m retaining wall during the year 2020-21 and constructed as proposed.
4j	Number of settling ponds	No proposal	Not applicable	2 settling ponds are constructed in the year 2013-14



4k	Specific comments of inspecting officer on waste dump management	Dumping is carried out at the proposed location and constructed retaining wall & garland drain along the toe of the waste dump
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Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposals	NIL	
5b	Area under backfilling of mined out area	No proposals	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	There is no generation of topsoil during plan period. Proposed working area falls in the exiting pit	NIL	
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Ore exists beneath the working level, backfilling at this stage is not advisable.

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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted on or before 1st July of every year	Submitted On 26/05/2020 for the year 2019-20	

6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	0.21 Ha proposed	0.21 Ha covered under plantation	Plantation done in the dump area.
6d	No. of saplings planted during the year	1400 No's saplings proposed	2570 No's saplings planted as over the dumps (2020-21)	
6e	Cumulative no .of plants	13,100	55,881 No's of saplings planted.	--
6f	Any other method of rehabilitation	No proposal	Not applicable	--
6g	Cost incurred on watch and care during the year	Rs. 70,000	Rs 300,000/- towards watch & ward, watering & purchase of saplings.	--
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NIL	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NIL	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NIL	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	NIL	

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	NIL	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NIL	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Envirnomenal monitoring proposed in the core zone and buffer zone	Regular environmental monitoring carried out for air, water, noise in core and buffer zone	Test results are within the permissible limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities has been carried out as proposed

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting is proposed with in the lease area	Grade wise separation is done with in lease area	--
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical method proposed for mineral sorting	Mechanical sorting is done with crushing and screening	200TPH of Screening plant is used
7c	Different grade of mineral sorted out at mines.	Size wise sorting proposed into different sizes like 10mm fines, +10mm, 40mm and +5-20mm	0-10 mm fines (below 55% Fe), 0 to 10mm fines, (55%-58% Fe) Lumps below 55% Fe, Lumps (55% to 58% Fe)	--

7d	Any beneficiation process at mines	No proposed	No such beneficiation is proposed in the mines.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Lumps & fines separation done by crushing and screening.

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposals for separate removal and utilization of topsoil	There is no generation of topsoil during plan period. The working area falls in the existing pit.	The working is in the broken up area, no top soil generated.
8b	Concurrent use or storage of topsoil	NO	NIL	Top soil used for plantation when it is generated.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock, rejects and fines are proposed	Separate dumps for overburden, waste rock, rejects and fines are maintained.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal for back-filling is made.	NIL	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	--	--	
8g	Survival rate	70 %	70 %	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed on haul roads to control airborne dust	Water sprinkling is done with tankers on haul roads regularly	Two water tankers of 8000 litres each were deployed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Gopod asthetic beauty maintained in and around the mine by plantation

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2021 A.R. Submitted up to 2019-20		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager & Mining Engineer: A.Sreekantha Reddy  Mining Geologist: K.Santhosh Reddy	A.Sreekantha Reddy was present during the course of inspection	As per annual returns for the financial year 2019-20

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under current (o/c) working - 5.18 Ha, used for waste disposal - 1.23 Ha, Mineral storage - 0.40 Ha, Occupied by Plant, buildings, residential, welfare buildings & roads - 0.81 Ha, Other Purpose (Mineral Storage, Green Belt)-0.43Ha	Appears to be correct.	As per annual returns for the financial year 2019-20
9d	Scrutiny of Annual return on afforestation	WML: 8000 @ 74% survival rate OML: 2250 @ 70% survival rate	Appears to be correct.	As per annual returns for the financial year 2019-20
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	57756 tonnes with 35-45%Fe	Appears to be correct.	As per annual returns for the financial year 2019-20

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: OB:Nil, Production: 114000 tones, CB: Nil  Dump working: OB/Production/ CB: Nil	Appears to be correct.	As per annual returns for the financial year 2019-20
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value per tonne Lumps 55% to below 58% Fe : Rs 1986 /-  Fines below 55% Fe Rs 1130 /- Fines 55% to below 58% : Rs 1089/-  Ex-mine Price : Lumps 55% to below 58% Fe : Rs 2393 /-  Fines below 55% Fe Rs 1353/- Fines 55% to below 58% : Rs 1304/-  Cost of the production Rs 1186.81 /- per tonne	Appears to be correct	DMF, NMET, Royalty not included in the cost of production, violation issued in the last inspection, lessee rectified in the Annual Return and recalculated the cost of production and Ex-mine price

9h	Scrutiny of Annual return on fixed assets	Value of the fixed assets in Rs 6673703/- including industrial, plant & machinery including transport equipment.	Appears to be correct	As per annual returns for the financial year 2019-20
9k	Scrutiny of Annual return on mining machineries	Excavators - 2(1.1CUM) Wheel loaders- 2 (1.6Cum) Tippers - 3 (16 tones) Wagon drilling-1 (115 MM dia) Water Tanker - 2 (8000 liters) Crusher -1 (200TPH)	Appears to be correct	As per annual returns for the financial year 2019-20

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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed		Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

**Date :**

(DR. Sudhakara T.L)

Indian Bureau of Mines