

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/394/BNG

Mine code : 30KAR03136

- (i) Name of the Inspecting : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : S/Shri Shivananda Reddy, Mines manager and Nishant Na
Official with
Designation
- (iv) Date of Inspection : 29/06/2018
- (v) Prev.inspection date : 04/12/2017

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAMGAD(ML 1715)**
- (b) **Registration NO.** : **IBM/372/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : KARNATAKA
District : BELLARY
Village : DHARAMPUR
Taluka : SANDUR
Post office :
Pin Code :
FAX No. : 08395260907/366, 944839550
E-mail : vnk2543@gmail.com
Phone : 08395 - 260366
- (f) Police Station : Sandur
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for : SRI.V.N.K.MENON,
correspondance NO.6, KHB COLONY,
SANDUR - 583 119.
3. (a) Lease Number : KAR0255
- (b) Lease area : 1.62
- (c) Period of lease : 10
- (d) Date of Expiry : 31/12/1991
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : V.N.K.MENON
 16,K.H.B.COLONY SANDUR
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : V.N.K.MENON
 CONTRACTOR, SANDUR,
 BELLARY, BELLARY KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : NISHANT BHANUDASAJI NATIYE,Full Time
 Qualification : B.E.MINING
 Appointment/ : 12/04/2018
 Termination date

Geologist

Name : VOLVOIKAR AMBRISH,Full Time
 Qualification :
 Appointment/ : 02/04/2018
 Termination date

Manager

Name : R SHIVANANDA REDDY
 Qualification :
 Appointment/ : 18/02/2010
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	28/02/1995
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	14/05/2013
	:	MS modif under MCR 1960	14/10/2014
	:	MP modif under 17(3) MCR 2016	08/11/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	Total 4.80 ha. of mineralized area was covered under G1 stage of exploration by 35 drilled boreholes.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Rs. 24379350/- for 35 boreholes.	Cumulative drilled meterage was 1597m
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil	G1 exploration achieved.
1e	Balance reserve as on 01/04/20	No proposal	1929,000 tonnes as on 01.04.2018 (+45% Fe).	
1f	General remarks of inspecting officers on geology, exploration etc			Total 4.80 ha. of mineralized area was covered under G1 stage of exploration by 35 drilled boreholes, cumulative drilled meterage was 1597 m.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1666200 to N1666425. E662530 to E662650	No change in development area.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Seperate benches for OB waste and ore.	Seperate benches for OB waste and ore.	
2c	Stripping ratio or ore to OB ratio	1:0.02	1:0.02	

2d	Quantity of topsoil generation in m3	No proposal	No top soil generation.	
2e	Quantity of overburden generation in m3	941 m3 (2034 tonnes)	943 m3 (2075 tonnes)	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			No deviation in respect of development was observed during the course of inspection dated 29.06.2018.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit	Single pit located southern side on the ML.	Diamension of existing pit 210m(L) x 190m x 60m (D).
3b	Quantity of ROM mineral production proposed	100000 Tonnes	99996 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	90% recovery	90% recovery from ROM	10% BHQ proposed to be stacked seperately as mineral rejects.
3d	Quantity of mineral reject generation	4570 tonnes	14100 tonnes	BHQ stacked seperately as mineral rejects
3e	Grade of mineral rejects generation and threshold value declared.	+35-45 Fe%	+35-45 Fe%	
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	No proposal	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	Drilling: Wagon drill machine. Explosive: Slurry explosive	No change.	
3k	Provision of mining machineries in mineral benches	Excavators, Dumpers ,Mobile Screening and Crushing Plants	Excavators, Dumpers ,Mobile Screening and Crushing Plants	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height: 08 Mtrs. Bench width:11 Mtrs	Bench height: 07 to 08 Mtrs. Bench width:10-11 Mtrs	
3m	Total area covered under excavation/pits	4.0 Ha	4.0 Ha, single pit	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.08	No change.	
3o	Total area put in use under different heads at the end of year	8.41 Ha. at the end of F.Y. 2021-22	6.36 Ha. so far.	
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 43000 2014-15: 130000 2015-16: 130000 2016-17: 130000 2017-18: 100000 (in tonnes)	2013-14: 43000 2014-15: 43000 2015-16: 43000 2016-17: 71000 2017-18: 99996 (in tonnes)	No deviation in respect of exploitation was observed during the course of inspection dated 29.06.2018.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping proposed for OB waste and mineral rejects.	Seperate dumping was carried out for OB waste and mineral rejects.	
4b	Location of topsoil, OB and mineral reject dumps	OB waste: N 1666530 to N 1666590 E 662740 to E 662800. Mineral rejects: N 1666425 to N 1666520 E 662600 to E 662700	OB waste: N 1666530 to N 1666590 E 662740 to E 662800. Mineral rejects: N 1666425 to N 1666520 E 662600 to E 662700	No change in location.
4c	Number of dumps within lease area and outside of lease area	02 nos. within ML, Nil Outside ML	02 nos. within ML, Nil Outside ML	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	In-active dump located partially within UPL and active dumping proposed outside UPL	No change, active dumping outside UPL	
4e	Number of active and alive dumps.	01 inactive and 01 active dump.	No change.	
4f	Number of dead dumps.	01	01 inactive dump.	
4g	Number of dumps established.	No proposal	Inactive dump partely stabilized.	
4h	Whether Retaining wall or garland drain all along dumps are there.	proposed as per the approved R & R plan.	Constructed Retaining Wall & Garland Drain all along the dump during 2016-17.	
4i	Length of Retaining wall or garland drain all along dumps	Proposed for all along bottom of the dumps as per approved R & R plan.	Retaining wall constructed: 448m Garland drain constructed: 385 m	
4j	Number of settling ponds	No proposals for 2017-18.	Constructed 2 nos. of Settling Ponds during 2016-17 & maintained the same. Dimensions: 60m x 6m x 2.5m and 21m x 12m x 3m	

4k	Specific comments of inspecting officer on waste dump management	Violation of rule 37(5) was issued to the lessee as inactive dump was not found to be suitably terraced and stabilized through vegetation or otherwise. At places, height of the dump in that area was found at a range from 20 to 25m.
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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 such proposals as mined out pit was not matured for back-filling	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	No top soil in the working pit.
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mined out pit is not matured for back-filling as mineral was still persisting at pit bottom/ working faces.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes proposed	Submitted for the year 2016-17.
6b	Area available for rehabilitation (ha) .	No proposal	Nil
6c	afforestation done (ha).	0.51 Ha.	0.5 Ha. along the safety barrier zone.
6d	No. of saplings planted during the year	100 nos.	85 nos.
6e	Cumulative no .of plants	Not specified	3000 nos.
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	5 lakhs	No change.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	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	Not applicable.	No waste land within ML.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Not applicable.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Not applicable.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Carried out periodically by external agency, parameters were found within limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No deviation in respect of PMCP compliance was observed during the course of inspection.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM proposed to be crushed and dry screening.	ROM was being crushed and dry screening.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised Crushing	Mechanised Crushing	
7c	Different grade of mineral sorted out at mines.	Proposed for +45% Fe from the ROM	+45% Fe	

7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			BHQ with grade 35 to 45% fe were stacked seperately.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil, as mining pit was devoid of any top soil.	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate dumps proposed for OB waste and mineral reject	Seperate dumps maintained for OB waste and for mineral reject.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals	Not applicable as ore not exhausted.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal	NIL, Mined out pit was not matured for back-filling and water reservoir.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML area is non-forest. There is proposal of planation of 100 nos of saplings in 0.51 Ha area within ML during year 2017-18	85 nos saplings within ML in 0.5 Ha areas were planted during year 2017-18. About 3000 nos of saplings were planted so far.	
8g	Survival rate	80%	90% survival rate.	
8h	Water sprinkling on roads to control airborne dust	Proposed.	The regular dust suppression by sprinkling of water is being made in the mine.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around mine was good as lessee had carried out afforestation and other environmental protective measures as per approved RMP.

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 July 2018 A.R. submitted upto FY 2017-18	Annual Return for FY 2017-18 submitted by the Lessee on 30/06/2018.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri Vinod Kumar Deshmukh. Mines Manager: Shri R. Shivananda Reddy Geologist: Shri Ambrish V.	Mining Engineer: Shri Vinod Kumar Deshmukh. Mines Manager: Shri R. Shivananda Reddy Geologist: Shri Ambrish V.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit/Mining: 4.0 Ha. Dumps: 1.47 Ha. Infrastructure /plant/buildings: 0.56 Ha.	Actual also same at that time
9d	Scrutiny of Annual return on afforestation	80 nos. within ML	85 nos.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	14100 tonnes	No change, 35-45%Fe
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NIL ROM stock.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price Below 55% Fe Lumps: Rs. 2000/ tonne 60% to below 62% Lumps: Rs. 3023/ tonne 62% to below 65% Lumps:Rs. 3083/ tonne 62% to below 65% Fines:Rs. 2778/ tonne Cost of production: Rs. 667/ tonne	Appeared to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 5800000/-	Fixed assets includes temporary office building, Plant and Machinery including transport equipment located within ML.
9k	Scrutiny of Annual return on mining machineries	Hydraulic Shovel: 2nos., Dumpers 2 nos., Water tanker: 1 no.	Appeared to be correct.

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
MCDR17	Rule 35(2)	12/07/2018			
MCDR17	Rule 37(5)	12/07/2018			

Date :**(KRISHNENDU CHATTERJEE)**

Indian Bureau of Mines