

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/454/BNG

Mine code : 30KAR03157

- (i) Name of the Inspecting : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : S/Shri N. Giridhar Rao, DGM and B.K. Murali Babu, Min
Official with
Designation
- (iv) Date of Inspection : 28/06/2018
- (v) Prev.inspection date : 12/08/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALLAHALL ML 2538**
- (b) **Registration NO.** : **IBM/217/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **KALLAHALLI**
- Taluka : **HOSPET**
- Post office : **KALLAHALLI**
- Pin Code :
- FAX No. : **080-41224388 (F),**
- E-mail : **premapawan@gmail.com,hnp25**
- Phone : **080-22200484 (O), 99017666**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** :
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **H.N.PREMKUMAR**
correspondance **3rd CROSS, 3rd MAIN, RMV V 2nd STAGE, HIG COLON**
BANGALORE - 560 094.
3. (a) **Lease Number** : **KAR1502**
- (b) **Lease area** : **19.15**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **27/02/2027**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : H.N.PREMKUMAR,
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : H.N.PREMKUMAR
 BELLARY KARNATAKA
 Phone:
 FAX :

Agent : H MUTHU REDDY
 GAVISIDDESHWARANAGAR HOSPET
 BELLARY KARNATAKA
 Phone: 9902542662
 FAX :

Mining Engineer

Name : N GIRIDHAR RAO, Full Time
 Qualification : B.Sc B.E MINING FCC 27 YRS
 Appointment/ : 04/12/2017
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	21/08/2007
		Mining Scheme rule 12 MCDR1988	13/02/2015
		MP review under 17(1) MCR 2016	25/01/2017
		MP modif under 17(3) MCR 2016	25/10/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal during 2017-18	Nil	
1b	Exploration over lease area for geological axis 1 or 2	G1	G1 and G3.	24 nos. of core boreholes and 28 nos. trial pits has been drilled in the ML area so far. 12 nos. of core boreholes further peopod by the lessee during 2018-19 and 2019-20.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	Expenditure incurred by the lessee for 24 nos. of core boreholes was Rs. 3509,800/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1	G1 and G2.	
1e	Balance reserve as on 01/04/20	No proposal	3260,000 tonnes of reserve (+45% Fe) as on 01.04.2018	
1f	General remarks of inspecting officers on geology, exploration etc			No deviation in respect of exploration was observed during the course of inspection dated 28.06.2018

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Mine Pit 1(South) and Mine Pit 3 (North).	Mine Pit 1(South) and Mine Pit 3 (North), Section D-D' to G-G'.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Seperate benches proposed for OB and ore.	Maintained for OB and waste.	
2c	Stripping ratio or ore to OB ratio	0.21	0.15	

2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	5357 m3	3643 m3	Intercalated waste generation during 2017-18 was less against proposal due to low contamination in iron ore reef working.
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 28.06.2018.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two nos., Pit 1 and Pit 3.	No change.	Diamention of Pit 1, Pit 2 and Pit 3 were 420m(L) x 100m(W) x 30m(D) ; 45m(L) x 10m(W) x 8m(D) and 120m(L) x 50m(W) x 10m(D) respectively.
3b	Quantity of ROM mineral production proposed	70,000 tonnes	70,000 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100% recovery	100% recovery.	
3d	Quantity of mineral reject generation	Nil	Nil during 2017-18.	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not Applicable.	
3f	Quantity of sub grade mineral generation.	Nil	No sub-grade generation.	
3g	Grade of sub grade mineral generation	No proposal	Not Applicable	

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No beneficiation except crushing and dry screening.	
3j	Provision of drilling and blasting in mineral benches	Proposed for hard strata	Yes, drilling and blasting adopted.	
3k	Provision of mining machineries in mineral benches	2 excavators and 6 dumpers	3 excavators (1 stand by) and 6 dumpers	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m bench height, width 6-8m.	Maintained except bottom most workings of Pit no. 1 where bench height was found at a range from 8 to 10 m.	Violation of rule 11(1) was issued to the lessee.
3m	Total area covered under excavation/pits	5.5 Ha. at the end of the Mod. RMP period (2021- 22)	5.1 Ha. including overlapping pit with M/s K.R. Kaviraj.	
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.21	1:0.15	
3o	Total area put in use under different heads at the end of year	12.63 Ha.	No change	
3p	Production of ROM mineral during the last five year period as applicable	2013-14: Nil 2014-15: 70,000 2015-16: 70,000 2016-17: 70,000 2017-18: 70,000 (In tonnes)	2013-14: Nil 2014-15: Nil 2015-16: 70,000 2016-17: 70,000 2017-18: 70,000 (In tonnes)	

3q	General remarks of inspecting officers on method of mining etc.	Violation of rule 11(1) of MCDR,2017 was issued to the lessee on 12.07.2018 for non maintaining bench heights as per proposal.
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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)	seperate temporary dumping proposed for OB	Temporary dumping of OB.	
4b	Location of topsoil, OB and mineral reject dumps	Temporary dumping at north western side of the ML	Temporary dumping at north western side of the ML	
4c	Number of dumps within lease area and outside of lease area	1 temporary dump within ML, no dumping outside ML.	1 temporary dump within ML, no dumping outside ML.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Part of the dumping within the UPL.	Part of the dump within the UPL.	
4e	Number of active and alive dumps.	1 active temporary dump	1 active temporary dump	
4f	Number of dead dumps.	No dead dump	No dead dump	
4g	Number of dumps established.	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed as per the approved R&R Plan.	constructed as per the approved R&R Plan within the ML area.	
4i	Length of Retaining wall or garland drain all along dumps	260m total at the end of the Mod. RMP period(2021-22)	53m retaining wall constructed during 2017-18; total 204m reaining wall conctructed so far.	
4j	Number of settling ponds	2 nos.	2 nos.	

4k	Specific comments of inspecting officer on waste dump management	Step-wise dumping with maximum height of 8 to 10m for each terrace is proposed, no such dump terracing was found constructed by the lessee along the active dump, violation of rule 11(1) of MCDR, 2017 was issued to the lessee dated 12.07.2018.
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Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Mining pits were not matured for backfilling as mineral is still persisting at pit bottom.	
5b	Area under backfilling of mined out area	No proposal	Not applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Mining pit was devoid of any top soil.	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			This chapter is not applicable for this ML as mineral was persisting at the working pits.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Proposed	Annual report on PMCP submitted upto 2016-17.
6b	Area available for rehabilitation (ha) .	No proposal	Nil
6c	afforestation done (ha).	Not specified.	0.4 Ha.
6d	No. of saplings planted during the year	1500 nos.	2000 nos. within ML.
6e	Cumulative no .of plants	Not specified	Approx. 10,000 nos. along the safety zone and in overlapping area.
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	Not specified.	Rs. 25,000/- during 2017-18.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Not applicable.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Not applicable.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Not applicable.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not applicable.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Not applicable.	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	No waste land within the ML area.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	No waste land within the ML area.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	No waste land within the ML area.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Carried out on monthly basis.	
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 mineral dispatch after crushing and dry screening.	ROM mineral dispatch after crushing and dry screening.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Proposed for +45% Fe.	55% to 58%, 58% to 60% and 60% to 62% Fe.	

7d	Any beneficiation process at mines	No proposal	Nil, except crushing and dry screening.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No deviation in respect of mineral conservation was found during the course of inspection.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Mining pits were 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 dumping for OB waste.		High silica 35 to 45% Fe was stacked seperately after notification of revised threshold value for iron ore.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed duirng conceptual stage.	Not Applicable.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not Applicable.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	Additional Plantation proposal was given along the safety barrier zone.	
8g	Survival rate	70%	70 to 80% within ML	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkler was being used along the mining haul road to mitigate air pollution.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Most of the ML area was degraded with mining and allied activities, no deviation w.r.t environment was observed during the course of MCDR inspection.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly Return submitted upto June-2018, Annual Return submitted upto 2017-18.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: N. Giridhar Rao Geologist: Kalaivendhan Manager: B.K. Murali Babu	Mining Engineer: N. Giridhar Rao Manager: B.K. Murali Babu	No whole time geologist has been appointed in the mine, Violation of rule 55(1) was issued to the lessee.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered by O/C mining: 5.1 Ha. Dump: 2.51 Ha. Infrastructure s: 2.3 Ha. Mineral storage: 1.06 Ha.	Appear to be correct	
9d	Scrutiny of Annual return on afforestation	2000 nos.	2000 nos. along the safety zone.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generation.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	58% -60% Fe (Lumps): 3000 tonnes Below 55% Fines: 1386 tonnes 55 to 58% Fines: 31000 tonnes	Appear to be correct, stacked within ML.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	55% to 58% Fe(Lumps): Rs.2518/ tonne, 58% to 60% Fe(Lumps): Rs.2560/ tonne, 60% to 62% Fe(Lumps): Rs.2258/ tonne Below 55% Fe(Fines): Rs. 1106/ tonne, 55% to 58% Fe(Fines): Rs. 1820/ tonne, Production Cost: Rs. 925/ tonne	Appear to be correct.
9h	Scrutiny of Annual return on fixed assets	Furnished as Nil.	Fixed assets includes office building, mining machineries and mobile plant present within the ML.
9k	Scrutiny of Annual return on mining machineries	Excavators 3 nos., Crusher: 1 no., Wheel loader: 2 nos., Water tanker : 1 no., Diesel generator :1 no.	Dumpers not included.

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	12/07/2018			
MCDR17	Rule 35(2)	12/07/2018			
MCDR17	Rule 45(5)(c)	12/07/2018			
MCDR17	Rule 55(1)(3)	12/07/2018			

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines