

**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 : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : H.Mruthyunjaya Reddy - Agent
Official with
Designation
- (iv) Date of Inspection : 24/07/2019
- (v) Prev.inspection date : 28/06/2018

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 correspondance** : **H.N.PREMKUMAR**
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	06 no of Vertical bore hole amounting to 180 meters of 30 meters each proposed with in the ML area	No Exploration carried out in FY 2018-19	Violation Pointed out
1b	Exploration over lease area for geological axis 1 or 2	Not Available	11.50 Ha is mineralized.	24 No of Core bore holes and 28 no's of trail pits has been drilled in the ML area so far.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	Not Applicable	Rs 35 lakhs spent on drilling for 24 core bore holes
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	7.73 Ha is proposed to be explored.	6 Core Boreholes proposed at an grid interval of 100 meters amounting to 180 meters in FY 2019-20
1e	Balance reserve as on 01/04/20		3.05 Million Tonnes	As per annual returns 2018-19
1f	General remarks of inspecting officers on geology, exploration etc			06 no. of Vertical bore hole amounting to 180 meters were proposed in FY 2018-19.It was observed that no exploration activity has been carried out as envisaged in the approved modified RMP.Violation pointed out

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	P1 (South) : N1683364 to 1683574 & E652862 to 653412 P3 (North) : N1683658 to 1683746 & E652916 to 652983	Less development was carried out Section C-C' to F - F' in pit lin grids N1683364 to 1683574 & E652862 to 653412 P3 (North) : N1683658 to 1683746 E652916 to 652983	It was observed that less amount of development was done in Pit No.1 (South Block) resulting in lower stripping ratio & Overburden handling. Violation pointed out
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed for OB and Ore	Separate benches Maintained for OB and Ore	In Ore-2 benches, In OB - 4 Benches
2c	Stripping ratio or ore to OB ratio	1:1.90	1:1.51	Bulk density: Ore - 2.8 T/Cum, Waste / OB - 2.6 T/ Cum.
2d	Quantity of topsoil generation in m3	No proposal	Not Applicable	No Generation of topsoil
2e	Quantity of overburden generation in m3	97,448 Tonnes	78,000 Tonnes	Less development was carried out Section line C-C' to F - F'.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Less amount of development was done in Pit No.1 (South Block) resulting in lower stripping ratio & Overburden handling. Violation pointed out

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Pits: Pit 1 (South) Pit 3 (North)	Working in Two Pits as per the Proposal	Approximate Dimension: Pit1 - 420 m X 80 m X 29m Pit3 - 120 m X 50 m X 14m
3b	Quantity of ROM mineral production proposed	1,17,824 Tons	1,17,824 Tons	No change
3c	Recovery of sailable/usable mineral from ROM production	In Iron Ore Reef : 80% & In Float Ore : 60%	In Iron Ore Reef : 80% & In Float Ore : 60%	-

3d	Quantity of mineral reject generation	No Proposal	10,200 Tonnes of Mineral reject generated and stocked	The same is reflected in annual returns submitted
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	Not Applicable	-
3f	Quantity of sub grade mineral generation.	No proposal	Not Applicable	-
3g	Grade of sub grade mineral generation	No proposal	Not Applicable	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method Proposed for segregating from ROM	Mechanized method adopted for segregating from ROM	Dry Crushing and Screening
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	No Beneficiation except Crushing and Screening
3j	Provision of drilling and blasting in mineral benches	Drilling and Blasting proposed for Hard Strata	Drilling & Blasting Carried out to win the ore	Drill Dia: 100 mm. Blasting is carried by Using of Slurry Explosives, In conjunction with D - Cord and Non Electric Detonators. 3m to 5m Spacing , 3m to 4m Burden, Depth of the hole is 6.5 m
3k	Provision of mining machineries in mineral benches	Provision proposed :Excavators - 3 - Nos,W/L 2Nos,Dump Trucks :8 No's,Screening Plant :2 No'sWagon Drill : 1 Nos	Machineries used: Excavators -3 - Nos,W/L : 2Nos,Dump Trucks :5 No's,Screening Plant :1No's	No change

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 Meters Bench Height, Width More than the bench Height	6 Meters Bench Height & Width More than the bench Height maintained	-
3m	Total area covered under excavation/pits	5.60 Ha at the end of the Modified RMP Period (2021-22)	Excavation area: 5.60 Ha	5.60 Ha excluding Overlap area with M/S KR Kaviraj.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.90	1:1.51	Violation Pointed out
3o	Total area put in use under different heads at the end of year	Area under Mining : 5.60 Ha, Storage for Topsoil / OB : 2.50 Ha, OB/Mineral reject Dump : 2.51 Ha, Mineral storage : 0.86 Ha, Infrastructure Area : 0.03 Ha, Roads: 0.74 Ha, Greenbelt : 1.22 Ha, Overlap Area : 3.15 Ha, Undisturbed Area : 1.68 Ha,	Area under Mining : 5.60 Ha, OB/Mineral reject Dump : 2.51 Ha, Occupied by Mineral storage, Roads , Infrastructure : 1.63 Ha Dump, Undisturbed Area , Greenbelt, Mine Approach road, Overlap Area : 12.23 Ha,	No significant Change
3p	Production of ROM mineral during the last five year period as applicable	2014-15: Nil 2015-16: 70,000 2016-17: 70,000 2017-18: 70,000 2018-19: 1,17,824 (in tonnes)	2014-15: Nil 2015-16: 34,550 2016-17: 70,000 2017-18: 70,000 2018-19 : 1,17,824 (in tonnes)	Actual production within the proposed limits
3q	General remarks of inspecting officers on method of mining etc.			Exploitation of mineral were within the proposed grids using drilling & blasting for hard stratas.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate temporary dumping proposed for OB	Temporary dumping carried out for OB	-
4b	Location of topsoil, OB and mineral reject dumps	Location of OB : N 1683533 to 1683733 & E 652814 to 652993	OB was dumped as per the proposed grids of N 1683533 to 1683733 E 652814 to 652993	Temporary dumping at North west side of the ML area
4c	Number of dumps within lease area and outside of lease area	within lease area : 2 outside lease area: 1	within lease area : 2 outside lease area: 1	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary dumping proposed with in UPL	Temporary dumping Carried out with in UPL	The Temporary Dumps shall be utilized for backfilling during the conceptual Plan period
4e	Number of active and alive dumps.	Active Dump : 1 Alive Dump : 1	Active Dump : 1 Alive Dump : 1	-
4f	Number of dead dumps.	01 No.	One dead dump	Dead dump Outside Lease area
4g	Number of dumps established.	One dump	One dump stablilized	Stabilized by plantation
4h	Whether Retaining wall or garland drain all along dumps are there.	R/W & GD Proposed as per approved R&R Plan	Constructed R/W & GD as per the approved R&R Plan within the mining Lease area.	-
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall & Garland Drain :-262 m L X 1m W X 1m H	Retaining wall & Garland Drain :-262 m L X 1m W X 1m H constructed	As per R & R plan
4j	Number of settling ponds	No Proposal	Not Applicable	2 No's of silt settling tank constructed as per the R&R in the Previous year.
4k	Specific comments of inspecting officer on waste dump management			Waste dumping was satisfactory in the mines. Retaining wall & Garland drain were constructed as per approved R & R Plan

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 proposal	Not applicable	Mining pits were not matured for back filling as mineral persist 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	Nil	-
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No proposal for backfilling at present due to persistence of mineral at depth & Mining pits were not matured for back filling

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 before 1st July of Every Year	Annual report on PMCP not submitted till date.	Violation Pointed Out
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	-
6c	afforestation done (ha).	0.24 Ha (Buffer zone)	0.24 Ha All along the Haulage Road	Afforestation done from office area to Check post which is outside the lease area
6d	No. of saplings planted during the year	1500 No's saplings proposed	1500 No's saplings planted	-
6e	Cumulative no .of plants	Not specified	Approx 10,000 sapling in and out lease area	-

6f	Any other method of rehabilitation	No proposal	Not applicable	-
6g	Cost incurred on watch and care during the year	Not Specified	Rs 6,48 Lacks Spent during the year	Spent towards watch & care
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	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)	Environmental monitoring proposed in Core zone and Buffer zone	Environmental monitoring Carried out in Core zone and Buffer zone on monthly basis	Environmental parameters were with in the permissible limit
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities carried out as per the proposed plan.Environmental monitoring Carried out in Core zone and Buffer zone on monthly basis

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting Proposed within the lease area	Grade wise sorting done by Dry Crushing and Screening	Graded materials are dispatched from the mining lease.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed Mechanical Method for mineral sorting	Mechanical method adopted	-
7c	Different grade of mineral sorted out at mines.	Different grades proposed: 0 - 55% Fe,55 - 58% Fe,58 - 62% Fe	Different grades sorted out in the mine :0 - 55% Fe,55 - 58% Fe,58 - 62% Fe	-
7d	Any beneficiation process at mines	No Proposal	Nil	Dry Crushing & Screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			All the low grade mineral is stacked and blended to meet the market requiremnt.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not applicable	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)	Separate dumping for OB proposed	Dumping of OB and stacking of low grade Carried out	Siliceous Ore was stacked separately after notification of the revised threshold value for iron ore
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Back filling is Proposed during conceptual stage	Nil	-
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)	Plantation proposed in buffer zone	1500 No's of Sapling in 0.24 Ha	-
8g	Survival rate	60 %	60 % outside the Lease area	Plantation done outside the ML area
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on Haul roads to Suppress the airborne dust	Water sprinklers was being used along the mining haul roads to mitigate air pollution	1 No's of Water tanker with 12000 ltrs capacity deployed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Greenary and aesthetic beauty is maintained in and around the mining area. Water tanker is deployed for suppressing the dust.

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 June - 2019 A.R. Submitted up to 2018-2019	Annual returns submitted on 21.05.2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri.Bharath Kumar .RS - Mines Manager Shri.K.Anil kumar - Geologist Shri.Shashidhara L - Mining Engineer	Same mine officials were available during the course of inspection	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining : 5.60 Ha, OB/Waste disposal : 2.51 Ha, Roads & Infrastructure : 1.63 Ha Other Purposes : 12.23 Ha	Appears to be Correct	
9d	Scrutiny of Annual return on afforestation	within the mining lease area : Nil, Outside the Lease area:1500 saplings @ 60% of survival rate	Appears to be correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	10,200 Tons	Stacked separately	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM : Opening Stock-Nil, Production - 117824 Tonnes,Closing Stock - Nil Dump Workings : 18,000 Tonnes as opening and closing stock	Appears to be correct	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production - Rs 925 /Ton, Ex-mine price- Rs1292 / Tone, Sale value- 1459	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Rs 9,16,507 Including Residential and Capitalized expenditure	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Excavators - 3 No's W/L : 2Nos Dump Trucks:5 No's Screening Plant :1 No Crushing Plant :1No	Appears 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 11(1)	01/08/2019			
MCDR17	Rule 26(2)	01/08/2019			

Date :**(ARUN KUMAR)**

Indian Bureau of Mines