

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

MCDR inspection REPORT

Goa regional office

Mine file No : KNT/BJP/Fe-2/GOA

Mine code : 30KAR05001

- (i) Name of the Inspecting : **SP01**) **SURESH PRASAD**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/SHRI. PRAKASH Y., MM & ME AND NAGRAJ RAO GHORPODE,
Official with
Designation
- (iv) Date of Inspection : 29-NOV-19
- (v) Prev.inspection date : 17-MAY-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HIREMAGI S. AIHOLLE**
- (b) **Registration NO.** :
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : BAGALKOT
- Village : HIREMAGI
- Taluka : HUNAGUND
- Post office : HIREMAGI
- Pin Code : 587112
- FAX No. : 08351-787740
- E-mail : hrmines@doddanavarbrothers
- Phone : 08351-787740
- (f) **Police Station** :
- (g) **First opening date** : 01-JUL-80
- (h) **Weekly day of rest** : SAT
2. **Address for correspondance** : **Doddannavar Brothers**
Corporate House,Opp Hotel Ksemainn,
Near 3rd Railway Gate, Khanapur Road, Belgaum
3. (a) **Lease Number** : **KAR0265**
- (b) **Lease area** : **45.3**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **04-JUN-00**
4. **Mineral worked** : **IRON ORE** Main

5. Name and Address of the

Lessee : DODDANAVAR BROTHERS
 Corporate House, Opp Hotel
 Ksemainn Near 3rd Railway
 Gate, Khanapur Road,
 BELGAUM KARNATAKA
 Phone: 0831-2466727
 FAX : 0831-2403401

Owner : PUSHPADANT PARISAPPA DODDANNAWAR
 Corporate House, Opp Hotel
 Ksemainn Near 3rd Railway
 Gate, Khanapur Road BELGAUM
 KARNATAKA
 Phone: 0831-2466727
 FAX : 0831-2403401

Agent : RACHAPPA MALLAPPA SARADAGI
 General Manager (Mines)
 Doddanavar Brothers At-
 Hiremagi, Tq-Hungund
 BAGALKOT KARNATAKA
 Phone: +919845739350, 08351-287740
 FAX : 08351-280125

Manager
 Name : Y PRAKASH
 Qualification : Dip. In Mining Eng. and II Class Mines M
 Appointment/ : 01-SEP-15
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	16-MAR-00
Plan/Scheme of Mining		Modif.of approved Mining Plan	03-DEC-04
		Mining Scheme rule 12 MCDR1988	28-OCT-05
		Modif.approved Mining Scheme	09-JUN-09
		Renewal under rule 24 MCR1960	26-OCT-10
		Mining Scheme rule 12 MCDR1988	29-APR-15
		MP modif under 17(3) MCR 2016	10-AUG-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	13 core bore holes	07 Core bore holes	The proposals and achievement are based on the approved MMP approved on 10.08.2018. However, RMP is submitted and is under process for next five years.
1b	Exploration over lease area for geological axis 1 or 2	13 nos. of bore holes 2018-19 and 13 bore holes in 2019-20	07 bore holes	Violation issued
1c	Exploration Agencies and Expenditure in lakh rupees during the year		The expenditure incurred reportedly Rs. 13.0 Lakhs during the year 2018-19.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	13.75 ha	about 10 ha.	As indicated in approved MMP that the most of the above unexplored area are present in the slopes and inaccessible places. Further, RMP has submitted and same will also be reviewed.
1e	Balance reserve as on 01/04/20		As on 1.04.2019, Total Reserve + Resource =11.92 MT	
1f	General remarks of inspecting officers on geology, exploration etc	Exploration of 13 holes was proposed each year 2018-19 & 2019-20 .	Exploration was not completed as proposed in the year 2018-19 & 2019-20 so far. Further, observed that the area is geologically disturbed with folded and fractured BHQ.	Violation issued for the deviation. Further, RMP has submitted and will also be reviewed.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Furnished	Observed that the bench geometry and pit designs for systematic and scientific mining as proposed in the above approved documents were not maintained.	Violation issued for rectification.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	No Top soil proposed & achieved.
2c	Stripping ratio or ore to OB ratio	1: 1.01	1: 0.99	
2d	Quantity of topsoil generation in m3	No Proposal	Not applicable	
2e	Quantity of overburden generation in m3	2,66,560 CUM	1,71,607 CUM	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Observed that bench geometry and pit designs for systematic and scientific mining were not maintained. Therefore, iolation issued. Therefore, Violation issued for rectification.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02 nos. of pits	02 nos. of pits	
3b	Quantity of ROM mineral production proposed	5,99,970 Tones	480500 Tones	Proposal as per approved MMP and achieved as per AR 2018-19.
3c	Recovery of sailable/usable mineral from ROM production	80%	90%	
3d	Quantity of mineral reject generation	393190 tonnes	The minersal rejects of grade between 35% - 45% Fe contens are used by blending.	

3e	Grade of mineral rejects generation and threshold value declared.	35-45 % Fe	About 35% Fe.	Observed optimum utalization of low grade material.
3f	Quantity of sub grade mineral generation.	NIL	NIL	
3g	Grade of sub grade mineral generation	Not applicable	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.	YES	YES	Bench Scale study was reportedly carried out at IBM Nagpur.
3j	Provision of drilling and blasting in mineral benches	YES	YES	
3k	Provision of mining machineries in mineral benches	Yes	Yes	HEMM deployment (Shovel and dumper combination)
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Method opted is suitable for the benches.
3m	Total area covered under excavation/pits	22.55 Ha cummulative	About 22.55 Ha cummulative	
3n	Ore to OB ratio for the pit/mine during the year.	1:1.01	1:0.99	
3o	Total area put in use under different heads at the end of year	Total area 26.14 Ha as per MMP	about 25 Ha	Cummulative figures

3p	Production of ROM mineral during the last five year period as applicable	2014-15 - 5.00LT 2015-16 - 5.00 LT 2016-17 - 5.00LT 2017-18 5.00 LT 2018-19 - 5.99 LT	2014-15 - NIL 2015-16 - NL 2016-17 - 1.862 L T 2017-18 - 2.3549 LT 2018-19 - 4.805 LT	Mines was not operated during the period 2014-15 & 2015-16. Figures are as per the approved MMP and AR.
3q	General remarks of inspecting officers on method of mining etc.		Mechanised Opencast mining method proposed and being followed with shovel dumper combination.	Violation issued for development of bench geometry and pit designs for systematic and scientific mining.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	YES	YES	
4b	Location of topsoil, OB and mineral reject dumps	Near south pit (pillar b/w nos. 9 &10)	Near south pit (pillar b/w nos. 9 &10)	
4c	Number of dumps within lease area and outside of lease area	within Lease area -02 Outside lease area- Nil	within Lease area -02 Outside lease area- Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near south pit (pillar b/w nos. 9 &10)	Near south pit (pillar b/w nos. 9 &10)	
4e	Number of active and alive dumps.	02	02	
4f	Number of dead dumps.	nil	nil	
4g	Number of dumps established.	01	01	
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	161 M & 218 M at the toe of the waste dump and MR dump.	450 M length	As per the report by Mines Manager during inspection & observation.

4j	Number of settling ponds	No Proposal	nil
4k	Specific comments of inspecting officer on waste dump management		Satisfactory

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 for backfilling during the year.	Not applicable	Minerals are not exhausted fully from the mining lease area.
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	Not applicable.	
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	No Proposal /achievement for reclamation & rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No Proposal /achievement for reclamation & rehabilitation as the minerals are not exhausted from the mining pits.	

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).	Yes	yes	Report submitted for the year 2018-19
6b	Area available for rehabilitation (ha) .	No Proposal	Not applicable	As the mineral was not exhausted fully from the pit.

6c	afforestation done (ha).			
6d	No. of saplings planted during the year		4070 nos. of sapling. within the lease	as per AR2018-19
6e	Cumulative no .of plants		Total numbers of sapling planted 25420 nos. (cummulative).	
6f	Any other method of rehabilitation	Not Proposed	Not Applicable	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Proposed	Not Applicable	Area not matured for backfilling.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Applicable	Not Applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	The Monitering of environment parameters is being conducted by third party agency.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Backfilling, reclamataion & Rehabilitation work are not proposed/ achieved as the mineral has not been exhausted fully from the pit.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade Wise Sorting	Grade Wise Sorting	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	

7c	Different grade of mineral sorted out at mines.	yes	yes	%Fe content -52-55%
7d	Any beneficiation process at mines .	Dry Screening &crushing	Dry Screening &crushing	Beneficiation plant erected near the lease area(outside lease area).
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Dry Screening &crushing being carried out within the lease area.	

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Not Generated.	
8b	Concurrent use or storage of topsoil	Not Proposed	Not Generated.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	yes	OB dumo 02 mineral Reject dump 01	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Not applicable	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2000 nos. in the year 2018-19	4070 nos of sapling	25420 nos. cummulative
8g	Survival rate	70-80%	65-70%	
8h	Water sprinkling on roads to control airborne dust	yes	Water tanker used for spraying on haul road.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Satisfactory. Mines Office area has been developed with good plantation and aesthetic beauty.	

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		MR Submitted up to the previous month. AR Submitted up to year 2018- 19.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Furnished	ME & Manager- Prakash Y Geologist - Nagraj Rao	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Open cast working- 22.55 ha waste disposal - 1.01 Ha Other purposes Mineral stock & green belt etc) 5.19Ha	Open cast working- 22.55 ha waste disposal - 1.01 Ha Other purposes Mineral stock & green belt etc) 5.19Ha	
9d	Scrutiny of Annual return on afforestation	Furnished	within lease 4070nos. Outside lease 15010 nos.	Observed poor survival rate.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	It has observed that +35-45% Fe contents are also being consumed by upgrading & blending with ore.	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing Stock-387790 tons Lumps Below 55% 778.110 tons Fines Below 55% 140725.199Tons	ROM closing Stock-387790 tons Lumps Below 55% 778.110 tons Fines Below 55% 140725.199Tons	Found in order
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	As per AR 2018-19 EX Mine price Lumps below 55% Fe - 2222.27 Rs/T Fines below 55% Fe - 1463.68 Rs/T	EX Mine price Lumps below 55% Fe - 2222.27 Rs/T Fines below 55% Fe - 1463.68 Rs/T Production cost -766 Rs/T	
9h	Scrutiny of Annual return on fixed assets	Furnished	Yes	Violation issued on rule 45(7) for rectification of returns on reserve and overburden handling paras.
9k	Scrutiny of Annual return on mining machineries	Furnished	Shovel 03 Loader 02 Air compressor- 1 Dumper 08 and other ancilliary equipments.	

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)	11-DEC-19			
MCDR17	Rule 45(7)(a)	11-DEC-19		10-FEB-20	

Date :

(SURESH PRASAD)

Indian Bureau of Mines