

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

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/52/BNG

Mine code : 30KAR03035

- (i) Name of the Inspecting : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : S/Shri Y.V. Rama Krishna Reddy, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 08/08/2017
- (v) Prev.inspection date : 14/11/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KARADIKOLLA SURESH**
- (b) **Registration NO.** : **IBM/243/2011**
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : BELLARY
- Village : KARADIKOLLA SURESH
- Taluka : HOSPET
- Post office : KARIGANUR
- Pin Code :
- FAX No. : 08394-226853 (F),pbsandson@
- E-mail : pbsandson@gmail.com.
- Phone : 08394-228332 (O),8971200394
- (f) **Police Station** : HOSPET
- (g) **First opening date** : 05/09/1953
- (h) **Weekly day of rest** : SUN
2. **Address for** : M/s P. BALASUBBA SETTY & SON
correspondance P.B.No. 3, Hampi Road,
HOSPET, Bellary -583201
3. (a) **Lease Number** : KAR0323
- (b) **Lease area** : 44.6
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 22/01/2006
4. **Mineral worked** : IRON ORE Main

5. Name and Address of the

Lessee : P.B.SETTY & SONS
D.No-2078, P.B.No-03 22nd
Ward, J.P.Nagar Bellary
Road, Hospet BELLARY
KARNATAKA
Phone:08394-265695, 265366
FAX :08394-265355

Owner : P.V.Prakash, M.Partner of M/s P.B. Setty & Son
D.No-2078, P.B.No-03, 22nd
ward, J.P.Nagar, Bellary
Road Hospet BELLARY
KARNATAKA
Phone: 08394-265595, 2
FAX : 08394-265355

Mining Engineer

Name : J.Vijay Narasihulu, Full Time
Qualification : BE, Mining
Appointment/ : 01/08/2017
Termination date

Geologist

Name : N. Shiva Prasad., Full Time
Qualification : M.sc Geology
Appointment/ :
Termination date

Manager

Name : Y.V.Ramakrishna Reddy
Qualification : Dip. in Mining
Appointment/ : 01/12/2011
Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	12/04/1991
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	07/02/1996
	:	Renewal under rule 22 MCR1960	26/06/2001
	:	Modif.of approved Mining Plan	20/12/2002
	:	Modif.of approved Mining Plan	23/03/2007
	:	Mining Scheme rule 12 MCDR1988	27/06/2008
	:	Modif.approved Mining Scheme	11/01/2013
	:	MS modif under MCR 1960	27/08/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 Bore holes	No exploration during 2016-17	Violation of Rule 11(1) was issued.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1 & G2	23 nos. of core boreholes drilled by the lessee during 2012-13 and 2013-14.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified.	No exploration was carried out during 2016-17.	
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	20,858500 MT	
1f	General remarks of inspecting officers on geology, exploration etc			Violation of Rule 11(1) was issued to the lessee for not carrying out exploration as per proposal during F.Y. 2016-17 and as on date of inspection.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Southern Side w.r.t Lease area	Southern Side w.r.t Lease area	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes.	No change.	
2c	Stripping ratio or ore to OB ratio	1:0.45	1:0.45	
2d	Quantity of topsoil generation in m3	No Proposal	Nil	
2e	Quantity of overburden generation in m3	61882 Cu.M	61880 Cu.M	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No deviation w.r.t development was observed during the course of MCDR inspection on 08.08.2017.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit, divided into 2 section as eastern and western sections	No Change	
3b	Quantity of ROM mineral production proposed	0.48 Million MT	0.48 Million MT	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	72,000 tonnes (15% of ROM)	In pit blending of mineral reject with high grade ore.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	45-58% 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.	Crushing and Dry screening	No change	

3j	Provision of drilling and blasting in mineral benches	Slurry explosive booster with conjugation with AFNO	No Change	Wagon drill & Non-EL Blasting
3k	Provision of mining machineries in mineral benches	Hydraulic excavators: 6 nos. Tipper: 14 nos. Wheel loaders: 3 nos.	07 nos. of hydraulic excavator and 16 nos. of trippers	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9 meters of bench height	Average 8- 9 meters of bench height	
3m	Total area covered under excavation/pits	13.27 ha	No change	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.45	No change	
3o	Total area put in use under different heads at the end of year	Mining-12.78 Dumps-15.69 Roads- 0.75 Afforestation- 1.41 (in Ha.)	Mining-13.27 Dumps-12.65 Roads- 1.11 Afforestation- 2.41 (in Ha.)	
3p	Production of ROM mineral during the last five year period as applicable	2012-13: 160,000 2013-14: 480,000 2014-15: 480,000 2015-16: 480,000 2016-17: 480,000 (in tonnes)	2012-13: Nil 2013-14: 440,150 2014-15: 476,000 2015-16: 478,850 2016-17: 480,000 (in tonnes)	
3q	General remarks of inspecting officers on method of mining etc.			No deviation w.r.t exploitation was observed during the course of MCDR inspection on 08.08.2017.

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)	No top soil	Nil	ML is broken up area.
4b	Location of topsoil, OB and mineral reject dumps	Waste dump location: N-1684200 to 1684480 E - 653720 to 653880	No Change	
4c	Number of dumps within lease area and outside of lease area	One active dump and two inactive dumps within the ML area	No Change. Dimension of active dump 270m X 200m X 50m	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	No change	
4e	Number of active and alive dumps.	One active dump	One active dump	
4f	Number of dead dumps.	02 Nos.	02 nos.	
4g	Number of dumps established.	No Proposal	Both inactive dumps and Active dump is partially stabilized by plantation.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes proposed	Found to be constructed as per the ICFRE approved R & R Plan.	
4i	Length of Retaining wall or garland drain all along dumps	275 m. of Retaining wall along with garland drain.	Found to be constructed and maintained.	
4j	Number of settling ponds	6 nos.	6 nos.	
4k	Specific comments of inspecting officer on waste dump management			No deviation w.r.t dumping was observed during the course of MCDR inspection on 08.08.2017.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Not Applicable	mineral is not exhausted in the working pit and B/F is not necessary as of now.
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	No Proposal	Not Applicable.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			This chapter is not applicable, because mineral is not found exhausted in the working pit & hence backfilling is not necessary as of now.

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	Annual Report on PMCP in accordance with Rule23 E (2) is submitted for the year 2015-16	
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	
6c	afforestation done (ha).	0.85 ha during F.Y. 2016-17	0.85 ha	
6d	No. of saplings planted during the year	2500	No change	
6e	Cumulative no .of plants	Not specified	Approx. 50,000 along inactive dump, green belt area, safety barrier and mine office.	

6f	Any other method of rehabilitation	Proposed	Geo textiles and Coir mating	
6g	Cost incurred on watch and care during the year	Not Specified	Rs. 6,10,000/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x 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	No waste land involved within ML area.
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)	Yes	Carried out periodically	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No deviation w.r.t Progressive Mine Closure Plan was observed during the course of MCDR inspection on 08.08.2017.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting of ROM by dry screening of ore	Found to be maintained	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Hydraulic excavator & tipper combination is used for mineral excavation & loading.
7c	Different grade of mineral sorted out at mines.	+58% Fe 45 to 58%Fe	No change	
7d	Any beneficiation process at mines	No proposal	Dry screening	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No deviation w.r.t mineral conservation is observed during the course of MCDR inspection dated 08.08.2017.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, Proposed	Waste Stacked Separately	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB & Waste will be used during Final Mine Closure for back filling	Not applicable	Mineral is not found exhausted in the working pits
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Will be complied during Final Mine Closure	Not Applicable	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	0.85Ha.	
8g	Survival rate	70 to 80%	70%	
8h	Water sprinkling on roads to control airborne dust	Proposed	4 water tankers and one mist spray tanker	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Entire ML is within forest land with thin vegetation. Most of the ML area is found to be degraded by mining & allied activities. Mining operation is carried out above ground water level. Healthy population of natural vegetation can be seen outside the ML area.
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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 Aug. 2017 and A.R. Submitted up to 2016-2017	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager: Y.V.R.Krishna Reddy. Mining Engineer: Shri K.V. Tejanath Geologist: N. Shiva Prasad.	No change for Mines Manager and Geologist. Mining Engineer: Shri J.Vijay Narasihulu	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under current O/C working: 13.27 Ha. Used for waste disposal: 12.65 Ha. Reclaimed: Nil	Appear to be correct.	
9d	Scrutiny of Annual return on afforestation	2500 nos.	No change	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	15% of ROM, Incidental in pit mineral reject quantity is not mentioned in AR.	Violation of Rule 45 (5) of MCDR, 2017 is issued to the lessee.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Fe Lumps: 11, 207 tonnes, and Fines: 22,000 tonnes	Lumps and fine stacks are being surveyed periodically by the officials of DMG, Karnataka.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price of different grades of lumps and fines are mentioned. Production cost: Rs. 515.84/ tone	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Fixed assets: Rs. 3460 lakhs	Office building, Mining machineries, Crushers & dry screens are found to be present within the ML area.
9k	Scrutiny of Annual return on mining machineries	07 nos. of hydraulic excavator, 16 nos. of tripper, 3 nos. of crushers and 5 nos. of water tankers	No change

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)	22/08/2017			
MCDR17	Rule 45(5)(c	22/08/2017			
MCDR17	Rule 11(1)	21/08/2017			
	Rule 45(5)	21/08/2017			

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines