

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

**Inspection under SDF for star rating of mines REPORT**

**Bangalore regional office**

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

**Mine code :** 30KAR03035

- (i) Name of the Inspecting : **A101** ) **ARUN KUMAR**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :  
Official with  
Designation
- (iv) Date of Inspection : 14/11/2018
- (v) Prev.inspection date :

**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),897120039!**
- (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
		MP review under 17(1) MCR 2016	27/11/2017
		MP modif under 17(3) MCR 2016	13/07/2018

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 Nos in 2016-17 & 4 Nos in 2017-18	09 bores holes drilled with total Meterage of 443 mts	No backlogs
1b	Exploration over lease area for geological axis 1 or 2	Not available	Area under G1 -6.37 ha Area under G2 -2.96 ha	23 nos of CBH drilled by the lessee during 2012-13 * 2013-14
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	Geotech Explorations, Nagpur and Expenditure is 18 Lakh	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	Nil	Non-mineralized area : 33.31 ha Total:42.10 Ha
1e	Balance reserve as on 01/04/20	-	20.378 MT as on 01.04.2018	-
1f	General remarks of inspecting officers on geology, exploration etc			09 Bores have has been completed which were backlog of 2016-17 & 2017-18 with total meterage of 443 mts.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Southern Side w.r.t Lease area proposed	Working in the Southern Side w.r.t Lease area	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is no separate benches for OB & mineral	Combined benches for OB & mineral	No generation of top soil. Area already broken up.
2c	Stripping ratio or ore to OB ratio	1:0.21	1:0.21	No change
2d	Quantity of topsoil generation in m3	No proposal	Nil	Working in broken up area
2e	Quantity of overburden generation in m3	29431	29428	No significant change

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development of the benches was done in the direction as per the proposal. There is no generation of top soil as the workings are in broken up area.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single Pit	Single Pit divided into two section as a eastern and western section	-
3b	Quantity of ROM mineral production proposed	0.48 MT	0.48 MT	-
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	No proposal	Nil	-
3e	Grade of mineral rejects generation and threshold value declared.	+45%Fe for hematite iron ore	Nil	-
3f	Quantity of sub grade mineral generation.	No proposal	57600 Tons	In pit blending of mineral reject with high grade ore
3g	Grade of sub grade mineral generation	No proposal	<45% Fe	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed	Mechanized method adopted	-
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	Slurry explosive booster with conjunction of ANFO	Drilling & Blasting adopted in mineral benches with 2 Nos of 115mm capacity of wagon drilling , and Slurry explosive	LOX licensee also available for blasting.
3k	Provision of mining machineries in mineral benches	Drill M/c-2 nos.,Excavator -7 Nos.,Tippers-14 Nos	1drill m/c,4 excavators & 7 tippers in operation	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8mtrs of bench height & 12 mts width proposed	8mtrs of bench height & 12 mts width(avg) is suitable for mining	-
3m	Total area covered under excavation/pits	13.73 ha	13.73 ha	-
3n	Ore to OB ratio for the pit/mine during the year.	1:0.21	1:0.21	No change
3o	Total area put in use under different heads at the end of year	Mining Pit 13.73Ha Waste dumps 11.3 Ha Infrastructure 0.20 Ha. Green Belt 1.52 Ha. Roads 0.95 Ha. Others 14.4 Ha. total 42.10ha	Mining Pit 13.73Ha Waste dumps 11.3 Ha. Infrastructure 0.19 Ha. Green Belt 1.46 Ha. Roads 0.95 Ha. Others 14.47Ha. total 42.10ha	Same as proposed
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 480000 2014-15: 480000 2015-16: 480000 2016-17: 480000 2017-18: 480000 ( in tonnes)	2013-14: 4,40,150 2014-15: 4,76,000 2015-16: 4,78,850 2016-17:4,80,000 2017-18:4,80,000 ( in tonnes)	Actual production is within the proposed production limits
3q	General remarks of inspecting officers on method of mining etc.			0.48 Million Tons extracted with 100% recovery. Drilling & blasting adopted to win the ore

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB proposed	Separate dumping of OB done.	No top soil & mineral reject
4b	Location of topsoil, OB and mineral reject dumps	Location of OB N-1684170 to 1684330 E - 653770 to 653870	No change in the location of OB dumping	-
4c	Number of dumps within lease area and outside of lease area	One active dump & 2 inactive dumps within the lease area	No change. Approx size 270mX 200mX50m	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside of the ultimate pit limit.	OB dumped outside the UPL	No change
4e	Number of active and alive dumps.	One number of active dump proposed	One number of active dump within the lease	-
4f	Number of dead dumps.	2 nos	2 nos	-
4g	Number of dumps established.	No proposal	Both inactive dump & active dump is partially stabilized	Stabilized by plantation
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall or garland drain all along dumps proposed	Retaining wall was not constructed all along the dump	As per the approved modified RMP dt 13.07.2018. Violation pointed out
4i	Length of Retaining wall or garland drain all along dumps	125m of retaining wall and 125 m of garland drain	Retaining wall along the toe of the dump was not constructed	As per the approved modified RMP dt 13.07.2018. Violation pointed out
4j	Number of settling ponds	1 No.	1 No.	Total 7 nos of settling ponds constructed
4k	Specific comments of inspecting officer on waste dump management			The location of the waste dump was as per the proposal. Retaining wall at the toe of the dump was not constructed. Violation pointed out

## 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	NA	Mineral is not exhausted in the working pit & B/F is not necessary as of now
5b	Area under backfilling of mined out area	No proposal	NA	-
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.			Mineral is not exhausted in the working pit & B/F 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).	Annual report before 1st July of every year setting	Annual Report 2017-18 Submitted on date 07/07/2017.	-
6b	Area available for rehabilitation (ha) .	0.2 ha	0.2 ha	-
6c	afforestation done (ha).	0.85 ha	0.18 ha	Remaining balance area of afforestation work completed during the year 2018-19
6d	No. of saplings planted during the year	2385 No.s	1100 No.s	Remaining balance of 1285 No. of sapling plantation work completed during the year 2018-19

6e	Cumulative no .of plants	603685	6,02,400	Plantation done on inactive dump, green belt area, safety barrier, mine office
6f	Any other method of rehabilitation	Geo textiles / Coir mating	Geo textiles / mating laid on dump	-
6g	Cost incurred on watch and care during the year	Rs. 5,00,000/-	Rs. 652682/-	-
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)Afforestati 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)	Yes	Carried out periodically	Environmental parameters within the permissible limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Environmental monitoring carried out regularly in core & buffer zone. Parameters observed within the permissible limits.

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Mineral Conservation:

Sl.No.	Item	Proposals	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	Hyd. Excavator & tipper combination
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	NA	Dry crushing & sizing

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No deviation wrt mineral conservation is observed during the course of MCDR inspection
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## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	No top soil, Already broken up area.
8b	Concurrent use or storage of topsoil	No proposal	Nil	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, proposed	OB 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 FMCP for backfilling	Nil	Mineral not exhausted
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Will be complied during FMCP	NA	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Available	1100 Nos. within mining lease area	Cummulative of 602400 saplings done
8g	Survival rate	No proposal	81%	-
8h	Water sprinkling on roads to control airborne dust	Proposed	4 water tankers and one mist spray tanker	Total -5 nos of water tanker deployed

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Entire ML is within the forest land .Most of the area is degraded. Healthy population of natural vegetation 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 October 2018, dated 10-11-2018 A.R. Submitted up to 2017-2018 dater 07-07-2018	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager Mining: Y V Ramakrishna Reddy, Mining Engineer : VijayaNarasihu lu, Geologist : N.Siva Prasad	Same officers were present during the course of inspection	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Current working :13.73 ha Waste dump : 11.30 ha Infrastructure : 1.20 ha Others : 13.54 ha Work done under Progressive mine closer plan during the year : 2.33	Appears to be correct	-
9d	Scrutiny of Annual return on afforestation	With in Mining Lease : 1100 plants are planted in year @ survival rate of 81%	Appears to be correct	

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM OB: Nil Production:480 000 Tons CB: Nil Dump workings- 354442 Tons(OB& CB)	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine price: Rs.2898.7 /tone , production cost : Rs. 569.91/ton	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Value of fixed assets: 351920130/-	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Excavators- 07 Nos,Front end loaders- 06,Rock Drill- 2N0's Crushers- 3 No's, Dumpers- 12No's	Appears to be correct

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**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)	06/12/2018			

**Date :**

**(ARUN KUMAR)**

Indian Bureau of Mines