

**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/437/BNG

Mine code : 30KAR03156

- (i) Name of the Inspecting : **M003**) **G C MEENA**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 24/09/2019
- (v) Prev.inspection date : 10/01/2017

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HADDINAPADE**
- (b) **Registration NO.** : **IBM/155/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : KARNATAKA
District : BELLARY
Village : HULIKUNTA
Taluka : SANDUR
Post office : SANDUR
Pin Code : 583119
FAX No. : 08395-260471 (F),geosurvey
E-mail : bkgsurveygeo@gmail.com
Phone : 08395-252139 (O),
- (f) Police Station : SANDUR
- (g) First opening date : 14/03/2006
- (h) Weekly day of rest : SUN
2. Address for : Sri B. Rudragouda
correspondance : #2198,BKG house, K.H.B.Colony,
SANDUR - 583 119,Bellary District Karnataka
3. (a) Lease Number : KAR1504
- (b) Lease area : 54.22
- (c) Period of lease : 20
- (d) Date of Expiry : 13/03/2026
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : B.RUDRA GOUDA
 #2198,BKG house,
 K.H.B.Colony, SANDUR - 583
 119,Bellary District
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : B.RUDRA GOUDA
 #2198,BKG house,
 K.H.B.Colony, SANDUR - 583
 119,Bellary District
 BELLARY KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : NARESH KAKUMANU,Full Time
 Qualification : B.E.IN MINING
 Appointment/ : 24/05/2010
 Termination date

Geologist

Name : PRAMOD S RITTI,Full Time
 Qualification : MSc Applied Geology
 Appointment/ : 01/12/2013
 Termination date

Manager

Name : P.SREENIVASA RAO
 Qualification : FCC, DIP IN MINING ENGINEER
 Appointment/ : 07/04/2006
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	16/05/2007
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	10/09/2012
		MP modif under MCR 1960	23/09/2015
		Mining Scheme rule 12 MCDR1988	03/03/2016
		MP modif under 17(3) MCR 2016	14/10/2016
		MP review under 17(1) MCR 2016	19/09/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for geological axis 1 or 2	5 No of core boreholes	TOTAL 16 no of Boreholes drilled. 10-DTH & 6-Core boreholes.	About 45Ha area is in G1 category
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Central Province Drilling Company	Central Province Drilling Company Expenditure is About 8 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2			About 15Ha in G3 & 20 Ha in unexplored /Non explored needs to be explored.
1e	Balance reserve as on 01/04/20		28.91MMT Reserves	16.623MMT Resources
1f	General remarks of inspecting officers on geology, exploration etc			

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South Block	South Block	workings are proposed in cross sections F-F', G-G' H-H' and I-I'
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	About 19 Benches are in ore with dyke & sill intrusions at places.	About 19 Benches are in ore with dyke & sill intrusions at places.	Intrusions are the only waste generation.
2c	Stripping ratio or ore to OB ratio	1:0.15	1:0.016	
2d	Quantity of topsoil generation in m3	No generation of topsoil proposed	No generation of topsoil.	As on date about 3700 m3 of Topsoil is generated & utilised in nursery and avenue road plantation purpose.

2e	Quantity of overburden generation in m3	76139	15228	Zero waste mining practiced.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit, workings are proposed in cross sections & I-I' F-F', G-G' , H-H' & I-I'	Single pit, workings are proposed in cross sections F-F',G-G', H-H' & I-I'	
3b	Quantity of ROM mineral production proposed	1.26 MMT	1.258MMT	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No Mineral Rejects generated	No Mineral Rejects generated	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	No Proposal	Whatever Subgrade mineral generated has been blended and sold through e-auction.	Whatever Subgrade mineral generated has been (will be) blended and sold through e-auction.
3g	Grade of sub grade mineral generation	No Proposal	--	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method, Deephole blasting and HEMM are used.	Mechanized method, Deephole blasting and HEMM are used.	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	--	
3j	Provision of drilling and blasting in mineral benches	MS delay detonators & cord relays will be utilised	MS delay detonators & cord relays are utilised for better fragmentation & control of vibration.	The formations are mostly soft & drilling blasting will be done only in hard strata.
3k	Provision of mining machineries in mineral benches	Excavators, Dozers, Wheel loaders, Volvo Dumpers, Drill machine, Compressor, Mobile Crushers & Screens	Excavators, Dozers, Wheel loaders, Volvo Dumpers, Drill machine, Compressor, Mobile Crushers & Screens	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Bench height 6-7m & Width more than 8m	Bench height is 6-7m & Width is ?8m	
3m	Total area covered under excavation/pits	18.558 Ha	18.558 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.15	1:0.016	
3o	Total area put in use under different heads at the end of year	28.1285 Ha	28.1285 Ha	
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 6,40,000 2015-16: 6,40,000 2016-17: 9,50,000 2017-18:12,60,000 2018-19:12,60,000 (in tonnes)	2014-15: 6,36,230 2015-16: 6,36,265 2016-17: 9,44,160 2017-18: 12,56,115 2018-19:12,58,075 (in tonnes)	
3q	General remarks of inspecting officers on method of mining etc.			

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB	Dumping of OB as per approved mining plan.	
4b	Location of topsoil, OB and mineral reject dumps	Overburden dump, In South block section X2-X'2	Overburden dump, In South block section X2'	Dumping in proposed area is not possible owing to denial from forest department to enter into the location & tree felling permission is kept on hold.
4c	Number of dumps within lease area and outside of lease area	3	3	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NW portion of south block	NW portion of south block	
4e	Number of active and alive dumps.	1	1	On Section Line X2-X2'
4f	Number of dead dumps.	2	2	
4g	Number of dumps established.	2	2	One Dump in South block is fully stabilized by covering Geo-textile matt, where as another in North block is partly stabilized
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	Constructed Retaining wall and Garland drain all along dump area.
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the year		As on date Retaining Wall-395m, Garland drain-339m constructed.

4j	Number of settling ponds	2 NOS	As tree felling is required, Monitoring committee during the visit to our mines on 25.08.2012 advised to wait till further instructions. 2 settling tanks constructed in alternate locations, based on requirement at site.
4k	Specific comments of inspecting officer on waste dump management		

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.	None	None	Our Mine started operations in the year 2006, So No proposals for backfilling.
5b	Area under backfilling of mined out area	NA	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	NA	
5d	Total area fully reclaimed and rehabilitated	NA	NA	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			

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 is submitted for the year 2017-18.	
6b	Area available for rehabilitation (ha) .	NA	NA	
6c	afforestation done (ha).	NA	NA	
6d	No. of saplings planted during the year	NA	NA	
6e	Cumulative no .of plants	NA	NA	
6f	Any other method of rehabilitation	NA	NA	
6g	Cost incurred on watch and care during the year	NA	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NA	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring Locations are Air Quality-10 Surface Water-3 Ground Water-6 Noise-10 Soil-5	Environmental Monitoring is regularly done through MOEF recognised Laboratory.	Monthly Compliance of Environmental monitoring stations is sent regularly to KSPCB.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes, Grade wise sorting within lease area	Dry crushing & screening for size separation	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical method with Crushers and Screening plants	Mechanical method with Crushers and Screening plants	EXTEC & SANDVIK MAKE machines are used.

7c	Different grade of mineral sorted out at mines.	>45% to < 65%	>45% to < 65%	
7d	Any beneficiation process at mines	Dry crushing & screening is done at mines	Dry crushing & screening is done at mines	Crushers of 100-150TPH & Screens 150-250 TPH are utilised
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NO PROPOSALS		So far 7400 Tons Top soil generated has been utilised in nursery & Avenue road for plantation.
8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden is planned	Overburden is dumped in northwest part of south block of mining lease area.	This year no proposal to generate mineral rejects.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	As on date no thought on use of overburden, waste rock, rejects is planned.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	Our mine started operations in the year 2006. No plans this year to restore mining pits, dumps.

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	DONE	DONE	List of additional plantations done after baseline information as per suggestions from ICFRE in 2011-12 & list of plantation carried out as on date.
8g	Survival rate	About 85%	About 85%	
8h	Water sprinkling on roads to control airborne dust	YES	6 Water Tankers & 1 Mist spray Air borne dust suppression system is used.	Also Fixed water sprinklers (jet) are provided on waste dumps, and drip irrigation is done at fruit bearing plantation & at Nursery
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto August 2019. A.R. submitted upto 2018-19.		Online M.R, submitted upto August- 2019.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Naresh Kakumanu- Mining Engineer, Pramod S. Ritti - Geologist, P.Sreenivasa Rao- Mines Manager.		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 18.558 Ha Dump:0.2662 Ha		
9d	Scrutiny of Annual return on afforestation	Total Number of Plantation : 11693		

- 9e Scrutiny of Annual return on mineral reject generation (Grade and quantity) There is no proposal to generate mineral rejects.
- 9f Scrutiny of Annual return on ROM stock and/or graded ore ROM stock: Nil Graded ore: 463792 Tons
- 9g Scrutiny of Annual return on sale value, Ex. Mine price and production cost Sale value: 2513918925.41Rs,
Ex. Mine price: 2149.35Rs,
Production cost: 1250.29Rs,
- 9h Scrutiny of Annual return on fixed assets
- 9k Scrutiny of Annual return on mining machineries
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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

Date :

(G C MEENA)

Indian Bureau of Mines