INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Bangalore regional office

Mine file No: KNT/BLR/FE/437/BNG Mine code: 30KAR03156

(i) Name of the Inspecting : \$006) SURESH PRASAD

Officer and ID No.

(ii) Designation : Regional Controller Mines

(iii) Accompaning mine : SRI.P.SREENIVASA RAO, GM, SRI.PRAMOD S RITTI, AGM

Official with Designation

(iv) Date of Inspection : 26/08/2022
(v) Prev.inspection date : 12/08/2021

PART-I : GENERAL INFORMATION

. (a) Mine Name : HADDINAPADE

(b) Registration NO. : IBM/44782/2022

(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),geosurveg
E-mail : bkgsurveygeo@gmail.com

Phone : 08395-252139 (0),

(f) Police Station : SANDUR

(g) First opening date : 07/04/2006

(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 : M/s BKG MINING PRIVATE LIMITED

NO. 2198, BKG HOUSE

KHB COLONY

SAND BELLARY KARNATAKA

Phone:9448395401

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 Plan/Scheme of Mining : Fresh under rule 22 MCR1960 10/06/2003 16/05/2007 Modif.of approved Mining Plan 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 MP review under 17(1) MCR 2016 09/11/2020 Modif.approved Mining Scheme 12/10/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	No backlog
1b	Exploration over lease area for geological axis 1 or 2	6 No of Boreholes 410meters & 8 No of Trail Pits	7 No of Boreholes 412meters & 8 No of Trail Pits	Drilling is completed as per mining plan for the year.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Central Province Drilling Company, Nagpur	Central Province Drilling Company, Nagpur	22 Lakhs Rupees spent for exploration
1d	Balance area to be explored to bring Geological axis in 1 or 2	19.606Ha Balance Area.	19.606Ha Balance	Detailed exploration is in progress.
1e	Balance reserve as on 01/04/20	27.74MMT+45%F e 8.94MMT+35- 45% Fe	27.74MMT+45%Fe 8.94MMT+35-45% Fe	As per AR submitted for FY2021-22
1f	General remarks of inspecting officers on geology, exploration etc			Out of 79.8.6 Ha area, exploration over 60.2 Ha has completed in axis 1 & 2. For balance 19.606 Ha exploration is under progress. Lessee has proposed 7 exploratory core boreholes over 390m depth during the year 2022-2023.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South Part of Lease N 1661989- 1661570 E 665991- 666782	South Pit N 1661989-1661570 E 665991-666782	Development is observed to be carried out within the proposed limit. Bench movement in SW & NE directions of South pit

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden and mineral is proposed	Separate benches in waste and ore are maintained.	OB:2 benches, Ore: 20 benches Separate benches maintained as proposed.
2c	Stripping ratio or ore to OB ratio	1:0.01	1:0.01	Ore: 1.562 million tones. OB: 0.026 million tones.
2d	Quantity of topsoil generation in m3	117 m3	117 m3	Topsoil of 117 m3 generated is utilized in Lessee nursery and for avenue road plantation.
2e	Quantity of overburden generation in m3	12400 m3	12897.5 m3	Waste is Segregated as shale & BHQ
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development works are carried out within the proposed grid limits and Benches are systematically maintained as per the approved proposals.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit proposed	Working is done in one pit only	Approx pit dimension 765mX475mX127m
3b	Quantity of ROM mineral production proposed	15,63,220 Tons	15,62,120 Tons	Production & Development achieved in accordance to the Revision of Production Limit from Monitoring Committee
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	The entire ROM produced is saleable and proposed 100% recovery.

3d	Quantity of mineral reject generation	No proposal	NIL	No Mineral Rejects generated.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NIL	THV Normal Hematite Ore +45%Fe and HSIO 35% 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	Mechanised method proposed for segregating from ROM	Mechanised method adopted for segregating from ROM	The segregating of ROM Ore is by mechanized method. Mobile crusher -1 with 100-150 T/Hr capacity and Mobile screens-3 with 250T/Hr are used for segregating the ROM.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	Working Bench Face Sampling is done as & when required.	
3ј	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 in nature & drilling blasting is done only in hard stratum.
3k	Provision of mining machineries in mineral benches	Volvo Dumpers,	Excavators-4, Wheel loaders-6 VolvoDumpers-10 Drill machine-1 & Compressor, Mobile Crusher-1 & Screens-3	Machineries as proposed are engaged in the mineral benches. 1 Dozer & 1 Crusher have been written off during the year 2021-22.

31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	height 6m & Width more	Bench height is 6m & Width is more than 8m.	The Benches are systematically developed as per the proposals by maintaining the height and width as per the approved Mining Plan.
3m	Total area covered under excavation/pits	22.97 На	22.93На	As per the AR for 2021-2022 it is 23.66 Ha which is wrongly given by adding Mineral storage area. Advised for rectification.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.01	1:0.01	In tonnes
30	Total area put in use under different heads at the end of year	Mining-22.97Ha Waste Dump- 2.43Ha Infrastructure -0.016Ha Roads-2.54Ha Safety Zone- 3.03Ha Mineral Storage-0.73Ha Total-31.716 Ha	Waste Dump-2.10Ha Infrastructure-0.016Ha	Lease area utilization as at the end of Plan Period. As per the AR for 2021-2022. However actual area under Mining is 22.93 Ha which is wrongly given by adding Mineral storage area and same has advised for rectification.
3p	Production of ROM mineral during the last five year period as applicable	2017-18: 12,60,000 2018-19: 12,60,000 2019-20: 12,60,000 2020-21: 12,60,000 2021-22: 15,63,220 (in tonnes)	2017-18: 12,56,115 2018-19: 12,58,075 2019-20: 12,58,145 2020-21: 12,58,145 2021-22: 15,62,120 (in tonnes)	Production Proposals & achieved figures are as per the online submitted Annual Returns of the respective years.

3q General remarks
 of inspecting
 officers on
 method of mining
 etc.

The Mine is a fully mechanized mine and machineries as proposed are engaged for development, Production and segregation of ore. The mine is systematically developed by maintaining the bench height and width as proposed.

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	Dumping is done as per approved mining plan.	Dumping of waste/OB is carried out at the proposed location by forming terraces. Topsoil has been utilized in lessee nursery for plantation/ preparation of saplings.
4b	Location of topsoil, OB and mineral reject dumps	Overburden dumping to be done in South block & Temporary dumping in North block.	OB is dumped in the area allotted for in south block & in North block as a temporary dumping.	Topsoil has been utilized in lessee nursery for plantation/ preparation of saplings.
4c	Number of dumps within lease area and outside of lease area	2-Inactive Dump 2-Active Dumps. All within the	2-Inactive Dump 2-Active Dump including 1 BHQ Temporary dump. All within the ML	2- Dumps have already been stabilized. 1- Active dump. Apart from these dumps, PTD-1- in which BHQ is separately dumped temporarily within the UPL located b/w 1662669-1662562N 665914-665963E . All dumps are located within the ML.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	AD-1 1662087- 1662057N 666070-666159E PTD-1 1662669- 1662562N 665914-665963E	AD-1 1662087-1662057N 666070-666159E PTD-1 1662669-1662562N 665914-665963E	Dumps are in NW portion of Lease area.
4e	Number of active and alive dumps.	2	Active dumping is being done in the South & North Blocks.	One temporary dumping is done in NW part of North Block.
4f	Number of dead dumps.	2	2	One each in North & South.
4g	Number of dumps established.	2	2	One Dump each in North & South block (dead dumps) are fully stabilized with Geo textile matt.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Partly completed.	Constructed part of the proposed Retaining wall and Garland drain all along dump. Violation issued.
4i	Length of Retaining wall or garland drain all along dumps	610meters	130meters	Violation issued.
4j	Number of settling ponds	No proposal during the year	NA	1 Within the ML and 1 outside the ML already exists.
4k	Specific comments of inspecting officer on waste dump management			There are 2 old inactive dumps which are stabilized. One active dump AD1 is systematically terraced by maintaining the required slope and construction of Retaining wall and garland drain is in progress and stabilized by plantation and geo-textiling. Apart from these 1 active Temporary BHQ dump exists which are maintained as per the proposals.

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	NIL	Since the Mineral exists beneath, no part of the mineral bearing zone is fully exploited.
5b	Area under backfilling of mined out area	No proposal	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NIL	Topsoil generated is utilized in safety zone and lessee nursery for afforestation sapling preparation.
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Since the Ore persists at depth, no pit or pit area is matured for backfilling and reclamation.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted	Annual report on PMCP is submitted via e-mail for the year 2021-22	
6b	Area available for rehabilitation (ha) .	No proposal	NIL	
6c	afforestation done (ha).	0.53 На	0.53 На	Safety zone plantation reported.
6d	No. of saplings planted during the year	600	15,722+550=16272 Includes kattali planted on waste dumps.	Appears to be correct.

бе	Cumulative no .of plants	4,51,231	4,51,231	Appears to be correct.
6f	Any other method of rehabilitation	No proposal	NIL	
6g	Cost incurred on watch and care during the year		Cost incurred about Rs 21,58,340/-	Reported cost appears to be in order.
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	
61	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	
бп	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NIL	

60	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 is regularly done through Mineral Engineering Services, Ballari, an MOEF recognised Laboratory.	Monthly Compliance of Environmental monitoring stations is sent regularly to KSPCB & Half yearly to MoEF&CC.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			As proposed the afforestation is done in the safety zone as gap filling and also along the slope of the dumps. PMCP activities are carried out in accordance with the Approved Mining Plan. However, the construction of proposed retaining wall and garland drain is not completed during the reporting year causing due to want of tree cutting permission from forest Dept. Now it is in progress. Violation issued.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes, Grade wise sorting of ROM within the lease area		Grade wise sorting done as per buyer requirements.

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanical method with Crushers and Screening plants	Mechanical method with Mobile Crushers and Screening plants	Capacity of machines is Crusher-100-150 T/Hr & Screen-250 T/Hr
7c	Different grade of mineral sorted out at mines.	>35% to < 65%	>35% to < 65%	Grade wise sorting done as per buyer requirements.
7d	Any beneficiation process at mines .	Dry crushing & screening.	Dry crushing & screening of ROM with mobile plants is done at mines.	No Beneficiation process. Only Mobile Screens & Crushers are being utilized/used for size sorting.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No beneficiation is carried out. The ore is segregated in grade wise and size wise into lumps and fines at mine site by engaging mobile crusher & screening

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Generation of 117 CuM	117CuM of Top Soil generated has been utilised.	So far generated Top soil has been utilized in Safety zone, lessee nursery & Avenue road for plantation purpose.
8b	Concurrent use or storage of topsoil	NA	NA	Top soil generated during FY 2021-22 is utilized as in Safety zone, lessee nursery & Avenue road for plantation purpose.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	- '	Waste is dumped in the area allotted for in south & north block as proposed temporary dump	Waste and BHQ dumped separately in the locations as proposed.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	Waste and BHQ dumped separately in the locations as proposed.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	AN	NA	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	4,51,231	4,51,231 includes outside lease planted trees of 64098 also.	Plantations done as per suggestions by ICFRE in the year 2011-12 & No of plantations carried out is as on date.
8g	Survival rate	About 85%	About 85%	Appears to be correct
8h	Water sprinkling on roads to control airborne dust		5 Water Tankers & 1 Air borne dust suppression system Mist sprayer is used for sprinkling on avenue roads.	Also Fixed water sprinklers (jet) on waste dumps, and drip irrigation is done at fruit bearing plantation & at in-house Nursery.
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine is good and all efforts are taken in its maintenance.

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 July 2022 *****		A.R submitted on 29.06.2022
		A.R. Submitted up to 2021-22		

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.	Verified and found all the Statutory persons were present on the day of inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Waste Dump- 2.10Ha Infrastructure -0.016Ha	Verified and found to be in order except area under mining is actually 22.93 and wrongly given by adding area under Mineral storage which is within the pit.
9d	Scrutiny of Annual return on afforestation	16272	Verified and appears to be in order.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	No mineral rejects are reported for the year.

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Scrutiny of
                         ROM stock: Nil
       Annual return on Graded ore
                                         Appears to be in order.
       ROM stock and/or (in Tons):
       graded ore
                         LUMPS
                         <55% -
                         97178.04
                         55-58% -
                         6292.20
                         58-60% -
                         248.05
                         60-62% -
                         371.00
                         62-65% -
                         20700.75
                         FINES
                          <55% -
                         44135.26
                         55-58% -
                         123.01
                         58-60% -
                         183.31
                         60-62% -
                         44675.02
                         62-65% -
                         76070.62
9g
       Scrutiny of
                         Sale value:
                                         Capitalized Expenditure
                                                                     Violation issued.
       Annual return on 5217185617.91R on exploration and
                                         DMF/NMET paid details
       sale value, Ex.
                         s,
                                         have not been furnished
       Mine price and
                         Ex. Mine
       production cost
                         price: Rs/Ton, and accounted for
                         LUMPS
                                         arriving at the cost of
                                         production.
                         <55% -
                         2797.00
                         55-58% -
                         4914.00
                         58-60% -
                         5337.00
                         60-62% - 00.00
                         62-65% -
                         5513.00
                         FINES
                          <55% -
                         1369.00
                         55-58% - 00.00
                         58-60% -
                         3680.00
                         60-62% -
                         4032.00
                         62-65% -
                         5328.00
                          Production
                         cost: 1635.02
                         Rs/Ton,
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9f

9h		assets Rs	Residential value considered is incorrect as the entire ML is forest land.	Violation issued.
9k	Scrutiny of Annual return on mining machineries	Submitted	Verified during inspection and found to be in order.	

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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)	16/09/2022			
MCDR17 Rule 45(7)(a	16/09/2022			

Date: (SURESH PRASAD)

Indian Bureau of Mines