MCDR-MIFLOFE/9/2023-BNG-IBM_RO_BNG INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Bangalore regional office

	Mine file No : KNT/BLR/Fe-413/A/BNG Mine code : 30KAR03133						
	(i)	Name of the Inspecting Officer and ID No.	:	S21) H M Shivakumar			
	(ii)	Designation	:	Assistant Controller Mine			
	(iii)	Accompaning mine Official with Designation	:	Sri. Vinod .S Mining engineer , Sri. Prasanna Kumar			
	(iv)	Date of Inspection	:	29/12/2023			
	(v)	Prev.inspection date	:	07/03/2023			
		PA	RT-	I : GENERAL INFORMATION			
1.	(a)	Mine Name	:	HARGINADONA			
	(b)	Registration NO.	:	IBM/4514/2011			
	(c) (d) (e) (f) (g) (h)						
2.		ess for espondance	:	Mr Allum Prashant, 11th ward, GADIGI PALACE, CAR STREET BELLARY-583101			
3.		Lease area Period of lease	:	KAR1515 76.63 50 20/07/2050			
4.	Mine	ral worked	:	IRON ORE Main			

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5.	Name and Address of	the		
	Lessee	:	ALLUM PRASHANT	
			GADIGI PALACE, CAR STREET, BELLARY, BELLARY KARNATAKA Phone:08392-274282/ 267666	
			FAX :08392-277845 /267666	
	Owner	:	ALLUM PRASHANT	
			GADIGI PALACE, CAR STREET, BELLARY, BELLARY KARNATAKA Phone: 08392-274282	
			FAX : 08392-267666	
	Agent	:	BASAVARAJ	
			Gadifi Palace, Car Street Ballari BELLARY KARNATAKA Phone: 9448441458	
			FAX :	
	Mining Enginee	r		
	Name Qualification	:	VEERABHADRAYYA PUJAR,Full Time	
	Appointment/ Termination da	:	01/01/2023	
	Mining Enginee	r		
	Name	:	VINOD JADHAV,Full Time	
	Qualification	:	B.E MINING	
	Appointment/ Termination da	: te		
	Geologist			
	Name	:	PRASANNA KUMAR,Full Time	
	Qualification	:		
	Appointment/ Termination da	: te		
6.	Date of approval of Plan/Scheme of Minin		Modif.approved Mining Scheme	09/07/2018 26/11/2019 19/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	9 holes are proposed in 21-22 over 270 Mtrs.	11 Nos RC/DTH boreholes Meters: 330	Backlog of 2021- 2022 exploration carried out in the year 2023-2024. No violations issued.
lb	Exploration over lease area for geological axis 1 or 2	No proposals during the RY 2022-2023.	Backlog of 2021-2022 exploration carried out in the year 2023-2024.	Remaining 04 holes are proposed in the year of 2025- 26.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Company (In house)	Company (In house) Expenditure Rs : 4.95 lakhs	Analysis of samples done by MSV Analytical laboratory, Ballari
1d	Balance area to be explored to bring Geological axis in 1 or 2		36.00 Ha needs to be explored	
le	Balance reserve as on 01/04/20		Iron ore: 13,17,214 MMIO :36,07,265	As per AR-2022- 2023. The MMIO Reserves is wrongly quoted as Ochre for which deficiency is pointed out.
lf	General remarks of inspecting officers on geology, exploration etc		The lease area has been divided into three blocks namely A, B & C for ease of reference. A block contains both Iron Ore and Martitized Magnetite Iron Ore (MMIO) and B & C blocks are having only MMIO. Ir A block Iron band- 500m X 10-30m (L X W) and 3 MMIO bands running parallel with Length 100-400m X 10-20m width. In B block, MMIO band is present over a length of 700m with discontinuity and width varying between 10-30m.	under G-1 scale of exploration with 4 RC/DTH holes in the year 2025-26.

Develop	Development :							
Sl.No.	Item	Propasals	Actual work	Remarks				

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2a	Location of	Ν	1674425	Ν	1674320
	development	Ν	1674661	Ν	1674520
	w.r.t.lease area	Е	689274	Е	689220
		Е	689500	Е	689440

2b	Separate benches in topsoil, overburden and minerals (Rule 15)		Total 5 benches and all benches comprises of waste and ore patches	
2c	Stripping ratio or ore to OB ratio	1: 1.90	1.2.56	Reduction of bench Height resulting in more OB generation and more stripping ratio.
2d	Quantity of topsoil generation in m3	NA	NIL	
2e	Quantity of overburden generation in m3	163905	190000	Reduction of excess bench Height resulting in more OB generation.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The entire mining lease divided into 3 blocks. However only one pit is developed in A Block developed with 5 working benches for winning Iron Ore and MMIO deposit suitable for the type of deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	Approx Dimension of pit. (250 x 135 x 51m.
3b	Quantity of ROM mineral production proposed	Iron Ore - 127000 MMIO-123000	Iron ore : 0.00 MMIO -74000	Violation issued for not achieving the proposed production.
3с	Recovery of sailable/usable mineral from ROM production	Iron ore -95% MMIO:95%	Iron ore -Nil MMIO: 80%	

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3d	Quantity of mineral reject generation	12090 MT	12090 MT	The Mineral reject quantity is not reported in the AR-2022-23. Discrepancies pointed out in SCN.
3е	Grade of mineral rejects generation and threshold value declared.	30 to 35 Fe%	30 to 35 Fe%	
3f	Quantity of sub grade mineral generation.	No proposal	NIL	NA
3g	Grade of sub grade mineral generation	No proposal	NIL	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Manual / Mechanized method proposed for segregating from ROM	Manual / Mechanized method adopted for segregating from ROM	Approx 70% of ROM generated is crushed and screened mechanically and rest 30% of ROM is segregated manually.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No such beneficiation study carried out in the reporting year.	
3j	Provision of drilling and blasting in mineral benches	Provision was made for drilling & blasting	Deep hole drilling and blasting is carried.	Wagon drill is used of 110mm dia, Slurry cartridges of 83 mm is used with shock tube detonation system. Spacing -3, burden 2 m and Sub-grade drilling-0.5 m
3k	Provision of mining machineries in mineral benches	Drilling unit -1	Excavator-3 Trucks-09 Wheel loader-2 Drilling unit -1 Water tanker -2 Crusher & Screener -2 Jeep -1	The reported machineries were found deployed on the day of inspection.

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31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed 8 Mts Height 8 Mts Width	Actual 8 Mts Height 8 Mts Width	
3m	Total area covered under excavation/pits	3.38 Ha at the end of plan period	3.38 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.90	1 : 2.56	Reduction of excess bench Height resulting in more OB generation.
30	Total area put in use under different heads at the end of year	Mining -3.38 Ha Dumps -4.8144 Ha Mineral storage 0.80 Ha Mineral separation plant- 0.20 Ha Infrastructure , work shop building etc- 0.010 Ha Roads- 0.726 Ha Green belt - 4.933 Ha Others: 0.910 Ha Afforestation -0.841 Ha Un used area- 59.96 Ha Total- 76.63 Ha		
3р	Production of ROM mineral during the last five year period as applicable	2021-22:123000 2022-23:123000 (in tonnes) Iron ore : 2018-19:127000 2019-20:127000	2019-20:48000 2020-21:122000 2021-22:121000 2022-23:74000 (in tonnes) Iron ore : 2018-19:78800 2019-20:81000 2020-21:126000 2021-22:31000	Violation issued for not achieving the proposed production of Iron Ore and MMIO.

3q General remarks of inspecting officers on method of mining etc. The entire mining lease divided into 3 blocks. However only one pit is developed in A Block developed with 5 working benches for winning Iron Ore and MMIO deposit suitable for the type of deposit.

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 was carried out as per proposal.	Violation pointed out for not reflecting the quantity of mineral rejects generated during the year.
4b	Location of topsoil, OB and mineral reject dumps	For OB B Block N 1674142 to N 1664284 E 688740 E 688877 For Mineral reject N 1673980 to N 1664050 E 689250 E 689340	For OB B Block N 1674138to N 1664278 E 688732 E 688860 For Mineral reject N 1673970 to N 1664040 E 689240 E 689320	
4c	Number of dumps within lease area and outside of lease area	Within ML: 6 OB Dumps OML : Nil	Within ML: 7 OB Dumps OML : Nil	A block: The side slops are divided into 5 dumps as per the stretch, D1, D2, D3, PD1A& PD1. B Block: PD-2 & PD-3
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB dumps proposed outside the UPL	OB dumping carried out Outside UPL	
4e	Number of active and alive dumps.		One active and alive dumps proposed in B Block.	

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4f	Number of dead dumps.		5 dead dumps proposed in A block.	
4g	Number of dumps established.	No proposal	5 dead dumps proposed in A block are under stabilization.	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	No proposal	The 1255m retaining wall and 1280m garland drains constructed in the past are being maintained.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	No proposal	No proposal of fresh construction during the RY.
4j	Number of settling ponds	No proposal	NA	2 settling ponds constructed in the past are being maintained.
4k	Specific comments of inspecting officer on waste dump management			The inactive waste dumps are being stabilized and systematically maintained with plantation and all the engineering structures like Retaining Wall and garland drains. Also, the active dumps are being managed 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	No part of the Mine pit is matured for backfilling and reclamation as the Mineral persists at depth.
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	

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5d Total area No proposal NIL
fully reclaimed
and
rehabilitated
5e General remarks
of inspecting
officers on
backfilling and

reclamation etc.

No part of the Mine pit is matured for backfilling and reclamation as the Mineral persists at depth.

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).	Annual report on PMCP to be submitted by 1stJuly 2023	PMCP for the year 22-23 is submitted. 07 July 2023(asper IBM Mail -in prescribedformat)	
6b	Area available for rehabilitation (ha) .	No proposal	NIL	
бс	afforestation done (ha).	Dump management :0.49 Ha Green belt afforestation :0.25 Ha	Dump management :0.49 Ha Green belt afforestation :0.25 Ha	
6d	No. of saplings planted during the year	Dump management : 1000 No's Green belt afforestation : 600 No's	2500 no of saplings planted the year of 22- 23 both dump and green belt and safety zone	Agave, Honge, Kare Jaali, Neem.
бе	Cumulative no .of plants	11200 saplings	13700 saplings	
6f	Any other method of rehabilitation	No proposal	Terracing and Plantation on the slope of dumps.	-
6g	Cost incurred on watch and care during the year	1.5 L	1.5 L	Appears to be correct.

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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
бm	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
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By way of plantation	Plantation carried out.

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бр	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in core zone & buffer zone.	carried out in core zone	Quarterly monitoring of environmental parameters was carried out by MSV Analytical laboratory, Ballari. All the environmental parameters were observed to be within the permissible limits
бq	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			All the proposed PMCP activities are carried out satisfactorily.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise and size wise sorting proposed within the lease area.	Grade wise and size wise sorting is carried out within the lease area.	70% Rom by mechanical and 30% ROM manually.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Proposed Manual/ Mechanical	Manual with deployment of labors by hand sorting & picking. Mechanically using Crushing and Screening.	2 nos of Crushing and screening unit (70TPH and30TPH).
7c	Different grade of mineral sorted out at mines.	Iron ore +45 Lumps and Fines MMIO +35 Fe% Lumps & Fines	Iron ore +45 Lumps and Fines MMIO +35 Fe% Lumps & Fines	
7d	Any beneficiation process at mines	No proposal	No such beneficiation is carried out.	Only Dry crushing and screening is done

7e

General remarks of inspecting officer on Mineral conservation and beneficiation issues The Mining lease area consists of low-grade Hematite Ore and MMIO which are suitably blended with higher grade ores to bring it to marketable grade. Also, manual sorting of ROM is carried out to carefully segregate it from the waste thereby taking care of mineral conservation aspects. However, no beneficiation studies are carried out till date.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	No generation of top soil	Work is carried out in already broken up area during the RY.
8b	Concurrent use or storage of topsoil	No proposal	Nil	Top soil as and when generated is used for plantation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate Dump for OB Proposed	Separate dump for OB is maintained.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	No generation of top soil	Work is carried out in broken up area.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)		NIL	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	11200 saplings	13700 saplings	Appears to be correct.
8g	Survival rate	30%	30%	30% survival rate
8h	Water sprinkling on roads to control airborne dust	tankers(5000	Two water tankers are used (5000 liters)	The reported water tankers were found deployed on the day of inspection.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine is satisfactorily maintained.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns			In Order.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	-	The reported officials were present on the day of inspection.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	workings- 3.388 Ha Waste Disposal			
		Work under PMCP during the year : 0.740 Ha Total - 76.63 Ha			
9d	Scrutiny of Annual return on afforestation	WML -3000 sapling OML-500 Saplings	Appears	to be co	prrect.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL			
9f	Scrutiny of Annual return on ROM stock and/or graded ore				

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9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Rs :878.45 Cost of Production -	The Ex-Mine price per tonne of Iron Ore Lumps & Fines (Hematite) from 45% to below 51% Fe and Iron Ore Lumps & Fines (Magnetite) below 45% Fe is observed to be much below the Average Sale price declared for the period 2022-2023. Violation pointed out.
9h	Scrutiny of Annual return on fixed assets		Appears to be correct.
9k	-	Trucks - 09	The reported machineries were found deployed on the day of inspection.

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)	06/02/2024		MCDR17 Rule	45(7)06/02/2024	
MCDR17 Rule 45(7)(a;06/02/2024				

Date :

(H M Shivakumar)

Indian Bureau of Mines