## INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

## MCDR inspection REPORT

## Bangalore regional office

	Mine :	file No : KNT/BLR/FE/1	50,	BNG	M	ine code :	30KAR03017
	(i)	Name of the Inspecting Officer and ID No.	:	S19 ) SANDEEP KUMAR	SINGH		
	(ii)	Designation	:	Assistant Controller M	line		
	(iii)	Accompaning mine Official with Designation	:	Shri P. Venkateswara F	ao, Min	e Manager,	Shri Domnic S
	(iv)	Date of Inspection	:	19/08/2022			
	(v)	Prev.inspection date	:	07/09/2021			
		PAF	2 <b>T</b> -	I : GENERAL INFORMAT	ION		
1.	(a)	Mine Name	:	VYASANAKERE			
	(b)	Registration NO.	:	IBM/199/2011			
	(c) (d) (e) (f) (g)	Category Type of Working Postal address State District Village Taluka Post office Pin Code FAX No. E-mail Phone Police Station First opening date	· · · · · · · · · · · · · · · · · · ·	A Fully Mechanised Opencast KARNATAKA BELLARY VYASANKERI HOSPET VYASANKERI 583201 (08394) 232333 rahulbaldota@mspllimi (08394) 232003 083942 Hospet 01/11/1962			
	(h)	Weekly day of rest		SUN			
2.		ess for espondance	:	M/s MSPL Limited BALDOTA ENCLAVE, ABHERA HOSPET, BELLARY-583201	J BALDO'	TA RD,	
3.	(a) (b) (c) (d)	Lease Number Lease area Period of lease Date of Expiry	:	KAR0196 858 20 13/11/2002			
4.	Miner	ral worked	:	IRON ORE	Main		

5.	Name	and Address of	the		
		Lessee	:	MSPL LTD	
				CO-OPERATIVE COLONY,	
				HOSPET, BELLARY, BELLARY KARNATAKA	
				Phone: 28402, 28502	
				FAX :08394-24537,25052	
		Owner	:		
				M/s MSPL Limited BaldotaEnclave,Abheraj	
				Baldota Road Hosapete	
				BELLARY KARNATAKA	
				Phone: 08394232002	
				FAX : 08394232444	
		Agent	:	K. MADHUSUDHANA	
				MSPL Limited, Baldota	
				Enclave Abheraj Baldota Road, Hosapete BELLARY	
				KARNATAKA	
				Phone: 08394-232002	
				FAX : 08394-232444	
		Mining Enginee	r		
		Name	:	DOMNIC SAVIO,Full Time	
		Qualification	:	BE MINING	
		Appointment/		01/04/2016	
		Termination da	te		
		Geologist			
		Name	:	Prasanth Laharia,Full Time	
		Qualification	:	M.Sc GEOLOGY	
		Appointment/		01/01/2022	
		Termination da	te		
		Manager			
		Name	:	P Venkateshawara Rao	
		Qualification	:	DIP IN MINING & FCC	
		Appointment/ Termination da	: te	01/09/2012	
б.		of approval of			30/11/1989
	Plan/	Scheme of Minin	g	Existing rule 11 MCDR1988 Mining Scheme rule 12 MCDR1988	06/08/1990 04/04/1996
				Fresh under rule 22 MCR1960	10/03/1997
				Renewal under rule 22 MCR1960	03/09/2002
				Modif.of approved Mining Plan Modif.of approved Mining Plan	13/08/2004 25/04/2005
				Mining Scheme rule 12 MCDR1988	30/04/2007
				Mining Scheme rule 12 MCDR1988	11/01/2013
				Modif.approved Mining Scheme	22/06/2016

MP review under 17(1) MCR 2016

MP review under 17(1) MCR 2016

MP review under 17(1) MCR 2016

FMCP under 23C(1)

04/11/2016

16/02/2021

16/02/2021

25/02/2021

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	No Proposal	NIL	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1-15 ha G2-Nil G3-Nil Non- mineralized- 339.71 ha	G1-15 ha G2-Nil G3-Nil Non- mineralized-339.71 ha	G-1 level of exploration completed& Geological Report submitted in accordance with Rule 12(4) of MCDR 2017.
le	Balance reserve as on 01/04/20	27,896,836 tonnes as on 31.12.2020 with grade range 62-68% Fe(HIO)	25,597,254tonnes as on 1.04.2022 after depleting production.	As reported in AR 2021-22.
lf	General remarks of inspecting officers on geology, exploration etc			The processed output [digital elevation model (DEM) and Orthomosaic] have not been submitted in accordance with the Standard Operating Procedures under sub rule (5) of rule 34A of MCDR, 2017 for carrying out drone survey and submission of Digital Aerial Images of Mining areas. Violation issued under Rule 34A(1) of MCDR 2017.

# Development :

Sl.No. Item Propasals Actual work Remarks	
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2a	Location of development w.r.t.lease area	(NA5-NA5' to DD')-North block FF' to L1-L1' in B-block. For North & A-	It was observed during inspection that the height and width of the few benches of North & A block at North western portion have not been maintained as per the proposal between Section NA-NA' to NC-NC.' Also, the vertical extent(mRL) of Block-B at Sec J-J' have been developed beyond the proposed vertical limit of 683 mRL.	Violation issued under Rule 11(1) of MCDR 2017.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	benches	It was observed during inspection that the height and width of the few benches of North & A block at North western portion have not been maintained as per the proposal between Section NA-NA' to NC-NC.' Also, the vertical extent(mRL) of Block-B at Sec J-J' have been developed beyond the proposed vertical limit of 683 mRL.	Violation issued under Rule 11(1) of MCDR 2017.
2c	Stripping ratio or ore to OB ratio	1:2.42 (In Cu.m)	1:2.44 (In Cu.m)	Ore: 1,761,370~ 503,248 Cu.m OB: 2,457,675 ~1,228,837 Cu.m
2d	Quantity of topsoil generation in m3	No proposal	NIL	NIL
2e	Quantity of overburden generation in m3	1,228,620 Cu.m proposed	1,228,837 Cu.m achieved	NIL

generation in m3

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

It was observed during inspection that the height and width of the few benches of North & A block at North western portion have not been maintained as per the proposal between Section NA-NA' to NC-NC'. Also, the vertical extent(mRL) of Block-B at Sec J-J' have been developed beyond the proposed vertical limit of 683 mRL. Violation issued under Rule 11(1) of MCDR 2017.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 pits proposed. N and A block, B block	Worked in 2 pits, N and A block, B block	NIL
3b	Quantity of ROM mineral production proposed	1,800,000tons proposed	1,761,370 tons achieved.	NIL
3с	Recovery of sailable/usable mineral from ROM production	100% proposed	100% achieved	NIL
3d	Quantity of mineral reject generation	No proposal	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NIL	NIL
3f	Quantity of sub grade mineral generation.	No proposal	NIL	NIL
3g	Grade of sub grade mineral generation	No proposal	NIL	NIL

3h Manual / Only Dry Crushing & Product size: 0 to Only Dry Mechanised screening carried out. 10mm(fines), 10 to crushing & method adopted screening Crusher: 40mm(Lumps/C-ore) for segregating proposed Specification: from ROM Capacity: 475 Tph-1. 150 Tph-1. 100 Tph-1. F NIL 3i Any analysis or No proposal NIL beneficiation study proposed and carried out for sub grade mineral and rejects. 3j Provision of Drilling and Drilling and Blasting NIL drilling and carried out Blasting in hard strata Proposed blasting in mineral benches in hard strata Drill-115 mm dia. Blasting Materials used: ANFO/Slurry in conjunction with detonators & safety fuse. As reported in AR 3k Provision of Yes Yes Mining Machinery mining 2021-22. Mining machineries in deployed: Machinerv mineral benches Proposed: Excavator- 3 Cu.m-7 Excavators-550 nos., 0.3 Cu.m-2 nos., TPH- 2 nos. 2.1 Cu.m- 3 nos. &300 TPH-3 Tipper: -25tonnes- 50 nos. nos. Tippers- 8 Drill-115 mm-4 nos. nos. Wheel Loader: Drill- 3 nos. Capacity-1.6 Cu.m-7 nos. Wheel loader-Water tanker-8KL- 1no. & 11. 12Kl-5 nos. 31 Whether height Height of Violation issued It was observed during under Rule11(1) of of benches in bench 9m-10 m inspection that the overburden and MCDR 2017. proposed for height and width of the mineral suitable both OB & few benches of North & A block at North western for method of mineral. portion have not been mining proposed in MP/SOM maintained as per the proposal between Section NA-NA' to NC-NC' 86.655 Ha as on 86.655 Ha 3m Total area As reported in AR 2021-22. covered under 1.04.2022 proposed excavation/pits

3n	Ore to OB ratio for the pit/mine during the year.	1:2.42 (In Cu.m)	1:2.44 (In Cu.m)	Ore: 1,761,370~ 503,248 Cu.m OB: 2,457,675 ~1,228,837 Cu.m
30	Total area put in use under different heads at the end of year	Mining-86.655 Waste dump- 84.292 Infrastructure &roads-16.557	Mining-86.655 Waste dump-84.292 Infrastructure &roads- 16.557	As reported in AR 2021-22.
3p	Production of ROM mineral during the last five year period as applicable	2017- 18:1,800,000 2018- 19:1,800,000 2019- 20:1,800,000 2020- 21:1,800,000 2021- 22:1,800,000 (In tonnes)	2017-18:1,800,000 2018-19:1,800,000 2019-20:1,800,000 2020-21:1,800,000 2021-22:1,761,370 (In tonnes)	CEC Limit-1.8 MMTPA.
3q	General remarks of inspecting officers on method of mining etc.			It was observed during inspection that the height and width of the few benches of North & A block at North western portion have not been maintained as per the proposal between Section NA-NA' to NC-NC'. Also, the vertical extent(mRL) of Block-B at Sec J- J' have been developed beyond the proposed vertical limit of 683 mRL. Violation issued under Rule 11(1) of MCDR 2017.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	dumping of OB proposed. No	Separate dumping of OB carried out at Waste dump. No topsoil & mineral Reject generation.	NIL

4b	Location of topsoil, OB and mineral reject dumps	649650	The waste dumping at dump no 3 at South eastern portion have been carried out beyond the proposed extent. (Actual N-1681966 E- 649317).	Violation issued under Rule 11(1) of MCDR 20017.
4c	Number of dumps within lease area and outside of lease area	5 OB dumps within lease area (D-1 & D- 4 inactive dump & D-2, D- 3 & D-6 dump active dumps)	5 OB dumps within lease area (D-1 & D-4 inactive dump & D-2, D-3 & D-6 dump active dumps).	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Portion of inactive dump D-4 & active dump D-6 within UPL	Portion of inactive dump D-4 & active dump D-6 within UPL	As per the last approved document.
4e	Number of active and alive dumps.	alive dumps	3 Active and alive dumps (D-2, D-3 & D-6) & 1 backfill North area	NIL
4f	Number of dead dumps.	2 Inactive/dead dumps within ML area (D-1 & D-4)	2 Inactive/dead dumps within ML area (D-1 & D-4)	NIL
4g	Number of dumps established.	No proposal	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	& garland	Retaining wall & garland drain construction carried along dump.	NIL

4i	Length of Retaining wall or garland drain all along dumps		500 metres Retaining wall and garland drain construction carried out along waste dumps	As reported by the Lessee during inspection.
4j	Number of settling ponds	proposed at	1 SST constructed & 1 construction in progress.	As reported by the Lessee during inspection. So far 5 out of 6 SST constructed.
4k	Specific comments of inspecting officer on waste dump management			The waste dumping at dump no 3 at South eastern portion have been carried out beyond the proposed extent. (Actual N- 1681966 E-649317). Violation issued under Rule 11(1) of MCDR 2017.

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.	<b>T</b>	Backfilling carried at the North Eastern exhausted pit Sec-NA5-NA5' to NA3- NA3')	NIL
5b	Area under backfilling of mined out area	2.5 Ha proposed	2 Ha achieved	As reported by the Lessee during inspection.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL	NIL

5e General remarks of inspecting officers on backfilling and reclamation etc. The plans and sections required under these rules shall be maintained up to date showing also the respective proposal of approved mining plan for various activities pertaining to that year, within three months in case of category 'A' mines as referred to in clause (a) of subrule(2) of rule 55. It was observed during inspection that the plans maintained have not shown the respective proposal of approved mining plan as per the provision of this rule. Violation issued under Rule 31(4) of MCDR 2017

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 before 1st of July every	The yearly report as required under Rule 26(2) of MCDR 2017 setting forth the extent of protective and Rehabilitative works carried out as envisaged in the approved final mine closure plan and if there are any deviations, reasons thereof shall be submitted before 1st of July every year. The yearly report has not been submitted as per the provision of this rule and FMCP approval condition.	Violation issued under Rule 26(2) of MCDR 2017.

6b	Area available	4 Ha proposed	4 Ha achieved	(Gap-filling
02	for rehabilitation (ha) .	i na proposed		plantation) Dump-D-1.
бс	afforestation done (ha).	4 Ha proposed	4 Ha achieved	(Gap-filling plantation) Dump-D-1.
6d	No. of saplings planted during the year	20000 saplings plantation proposed	19000 saplings planted	As reported in AR 2021-22.
бе	Cumulative no .of plants	1,00,000 from 2017-18 to 2021-22 as per the approved document.	96,000 from 2017-18 to 2021-22 as per the Annual returns of the respective year.	As reported in ARs.
6f	Any other method of rehabilitation	No proposal	NIL	NIL
бд	Cost incurred on watch and care during the year	43.11 lacs proposed for dump management & watch and care.	As per proposal	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	260m x 250m x 70m proposed for backfill.	130m x 60m x 25m backfilling carried out	As reported by the Lessee during inspection.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Void filled by waste proposed, 2,04,200Cum~4, 08,400 tons.	Void filled by waste, 1,95,000 Cum-3,90,000 tons	As reported by the Lessee during inspection.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No proposal	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NIL	NIL

61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	NIL	NIL
бn	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NIL	NIL
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	NIL	NIL
бр	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in both core and buffer zone.	Environmental monitoring carried out for air, water, noise and soil in both core and buffer zone as per the proposal. March-22 monitoring report available during inspection. Parameters within limit.	Parameters within limit.

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.

The yearly report as required under Rule 26(2) of MCDR 2017 setting forth the extent of protective and Rehabilitative works carried out as envisaged in the approved final mine closure plan and if there are any deviations, reasons thereof shall be submitted before 1st of July every year. The yearly report has not been submitted as per the provision of this rule and FMCP approval condition. Violation issued under Rule 26(2) of MCDR 2017.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Only Dry crushing & screening proposed	Only Dry Crushing & screening carried out. Crusher: Specification: Capacity: 475 Tph-1. 150 Tph-1. 100 Tph-1.	Product size: 0 to 10mm(fines), 10 to 40mm(Lumps/C-ore)
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No grade wise sorting proposed	NIL	NIL
7c	Different grade of mineral sorted out at mines.	No grade wise sorting proposed.	Lumps 62-65% Fe. Fines 62-65% Fe	As reported in AR 2021-22
7d	Any beneficiation process at mines	No proposal	NIL	NIL

7eGeneral remarksThe mineralof inspectingconservationofficer onactivities areMineralcarried out insideconservation andmine as per thebeneficiationproposal.issues

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	NIL
8b	Concurrent use or storage of topsoil	No proposal	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	for OB dumping	3 Active dumps for OB dumping (D-2, D-3 & D-6) & 1 backfill North area.	The waste dumping at dump no 3 at South eastern portion have been carried out beyond the proposed extent. (Actual N- 1681966 E-649317). Violation issued under Rule 11(1) of MCDR 2017.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use		130m x 60m x 25m backfilling carried out.	As reported by the Lessee during inspection.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NIL	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1,00,000 from 2017-18 to 2021-22 as per the approved document.	96,000 from 2017-18 to 2021-22 as per the Annual returns of the respective year.	As reported in ARs.

8g	Survival rate	85 % proposed within ML.	85% achieved within ML.	As reported in AR 2021-22.
8h	Water sprinkling on roads to control airborne dust	sprinkling	Water sprinkling carried out with 8KL-1 no and 12 Kl-5 nos. of water sprinklers to control airborne dust.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The waste dumping at dump no 3 at South eastern portion have been carried out beyond the proposed extent. (Actual N- 1681966 E-649317). Violation issued under Rule 11(1) of MCDR 2017.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	up to July-22 on 08.08.2022	M.R. Submitted up to July-22 on 08.08.2022 A.R. Submitted up to 2021-22 on 29.06.2022.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer,	5	Appears to be correct.	NIL
	Geologist and Manager	Mining Engineer-Shri. DOMNIC SAVIO J		
		Geologist- Shri. PRASHANT LAHARIA		

9c Scrutiny of i)Covered Appears to be correct. NIL Annual return on under current land use pattern o/c working-86.655 ha for area under pits, reclaimed ii)Used for area, dumps etc. waste disposal-84.292 ha iii)Occupied by plant, buildings, residential, welfare buildings & roads -16.557 ha 9d Scrutiny of 19000 nos. of Appears to be correct. NIL Annual return on saplings afforestation within ML area with 85% survival rate 9e Scrutiny of NIL NIL Appears to be correct. Annual return on mineral reject generation (Grade and quantity) 9f Scrutiny of ROM Appears to be correct. NIL Annual return on O/s-0 tons ROM stock and/or Production-1,761,370 tons graded ore C/s-0 tons. Graded Ore 0/s-278,376.33 tons Production-1,761,370 tons Despatch-1,605,163.45 tons C/s-434,582.88 tons. (Includes both lumps & fines)

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	3625 Rs/ton	Appears	to be	correct.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs. 274614029 including Land, industrial & plant, and machinery.	Appears	to be	correct.	NIL
9k	Scrutiny of Annual return on mining machineries	Excavator- 3 Cu.m-7 nos., 0.3 Cu.m-2 nos., 2.1 Cu.m- 3 nos. Tipper: -25tonnes- 50 nos. Drill-115 mm-4 nos. Wheel Loader: Capacity-1.6 Cu.m-7 nos. Water tanker- 8KL- 1no. & 12K1-5 nos. etc.	Appears	to be	correct.	NIL

	Violatior	n observed		Show c	ouse position
Rule N	10.	Issued on	Compliance on	Rule NO.	Issued on Compliance or
MCDR17	Rule 11(1)	05/09/2022	30/11/2022		
MCDR17	Rule 26(2)	05/09/2022	30/11/2022		
MCDR17	Rule 31(4)	05/09/2022	30/11/2022		
MCDR17	Rule 34(1)	05/09/2022	30/11/2022		

Date :

### (SANDEEP KUMAR SINGH)

Indian Bureau of Mines