

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

**MCDR inspection REPORT**

**Bangalore regional office**

**Mine file No :** KNT/BLR/Fe-496/BNG

**Mine code :** 30KAR03187

- (i) Name of the Inspecting : **OM5** ) **Dr.OMKESHA MURTHY.M.G**  
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Sri. Vishwajit Ghosh - GM Mines, Sri. Dasharatha.R -  
Official with  
Designation
- (iv) Date of Inspection : 22/12/2022
- (v) Prev.inspection date : 16/02/2022

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KARADIKOLLA IRON ORE MINE**
- (b) **Registration NO.** : **IBM/199/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : KARNATAKA  
District : BELLARY  
Village : KARADIKOLLA  
Taluka : SANDUR  
Post office : SUSHEELANAGAR  
Pin Code : 583119  
FAX No. : 08394232444  
E-mail : email@mspllimited  
Phone : 08394232002, 08394232003
- (f) Police Station : Sandur
- (g) First opening date : 12/03/2020
- (h) Weekly day of rest : SUN
2. Address for : Siddapur Village  
correspondance Sandur taluk, Bellary District  
Karnataka
3. (a) Lease Number :
- (b) Lease area : 86.12 Ha as per CEC
- (c) Period of lease : 50Years
- (d) Date of Expiry : 02/02/2070
4. Mineral 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 : Dr. Meda Venkataiah..Nominated 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 Engineer  
 Name : MURALIDHAR T,Full Time  
 Qualification : BE IN MINING FCC  
 Appointment/ : 02/04/2012  
 Termination date

Geologist  
 Name : ADHINARAYANAKANTA,Full Time  
 Qualification : M.Sc GEOLOGY  
 Appointment/ : 02/04/2012  
 Termination date

Manager  
 Name : Dasharatha R  
 Qualification :  
 Appointment/ : 12/03/2020  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : MP under 16(1) of MCR 2016

24/10/2017

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	Proposed 1 RC Bore hole (PBH 5) 660891E, 1677180N	Drilled 1 RC Bore hole (DBH 5) 660891E, 1677180N	Drilled 56m vertical hole
1c	Exploration Agencies and Expenditure in lakh rupees during the year	--	Rock Teck Enterprises, & 2.48 Lakhs	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposals	NIL	AS per Approved MP Mineralized area explored Gl is 22Ha
1e	Balance reserve as on 01/04/20	--	10.2216 MMT	AS per AR
1f	General remarks of inspecting officers on geology, exploration etc			Exploration proposals as per the approved plan have been carried out.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	PD-2 (E 659300-E 659700 N 1678200-N 1678600) PD-3 (E 659000-E 659300 N 1678700-N1679250) BF-1(E 660800-E 661000 N 1677080-N1677250)	Worked as per approved plan	In proposed Back filling area(BF1) ore has not exhausted

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposals	NIL	NIL
2c	Stripping ratio or ore to OB ratio	1:0.97	1:0.86	--
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	137760	121537	NIL
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of the mine is as per the approved mining plan.

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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2	2	As per proposal
3b	Quantity of ROM mineral production proposed	509940 tons	510000 tons	NIL
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	NIL
3d	Quantity of mineral reject generation	No Proposals	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	No Proposals	NIL	NIL
3f	Quantity of sub grade mineral generation.	NIL	NIL	NIL
3g	Grade of sub grade mineral generation	NIL	NIL	NIL

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3h	Manual / Mechanised method adopted for segregating from ROM	Crushing and screening of the ore is proposed	As per proposal	2 Screens are being used each of 180TPH.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Drilling and Blasting Proposed for winning ore in lease area and proposed height of benches 9m and 9-10 mts Width in ore/OB/ SB benches.	As per proposal maintained	NIL
3k	Provision of mining machineries in mineral benches	Machinery Proposed viz., Excavators, rock breakers, Dumpers, tippers, wheel loaders, water tankers, drill machines, Mobile crushing & screening	As per proposals	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height: 9m Bench Width: 9-10m	Maintained to the maximum extent possible	NIL
3m	Total area covered under excavation/pits	Total 47.41 fro plan period and present year Mining pit 46.21Ha.	As per proposal	As per AR for the year 2021-22.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.97	1:0.86	NIL

3o	Total area put in use under different heads at the end of year	Mining Pit - 46.21Ha. Waste disposal- 16.79 Ha Infrastructure Roads 3.74Ha Other Purpose- 19.38Ha	As per AR submitted for the year 2021-22	NIL
3p	Production of ROM mineral during the last five year period as applicable	2019-20: 510138 2020-21:510048 2021-22:509940 ( in tonnes)	2019-20:262400 2020-21:510000 2021-22:510000 ( in tonnes)	--
3q	General remarks of inspecting officers on method of mining etc.			Systematic bench formations were observed and Mining is being done as per the proposal.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate Waste Dump is proposed	Carried out as per proposal.	--
4b	Location of topsoil, OB and mineral reject dumps	PD-2 (E 659300-E 659700 N 1678200-N1678600) PD-3 (E 659000-E 659300 N 1678700-N1679250) BF-1 (E 660800-E 661000 N 1677080-N1677250)	Carried out PD-2 (E 659300-E 659700 N 1678200-N1678600) PD-3 (E 659000-E 659300 N 1678700-N1679250)	OB dump at BF1 not possible as there non exhaust of mineral
4c	Number of dumps within lease area and outside of lease area	WML 13 (ID-8, AD-1&PD-3) OML-9 (EID-9)	WML 13 (ID-8, AD-1 & PD-3 &) OML-9 (EID-9)	NIL

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	PD-2 (E 659300-E 659700 N 1678200-N1678600) PD-3 (E 659000-E 659300 N 1678700-N1679250) BF-1 (E 660800-E 661000 N 1677080-N1677250)	PD-2 (E 659300-E 659700 N 1678200-N1678600) PD-3 (E 659000-E 659300 N 1678700-N1679250)	NIL
4e	Number of active and alive dumps.	PD2, PD3 and BF1	Active dumps PD2 and PD3	BF1 not possible as there non exhaust of mineral
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NIL	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed Retaining wall and garland drain for all dumps in approved R&R Plan.	As per plan	Constructed as per approved R & R proposals.
4i	Length of Retaining wall or garland drain all along dumps	1064m proposed as per Approved R&R Plan.	As per plan	Constructed as per approved R & R proposals.
4j	Number of settling ponds	Proposed in Approved R & R (SST-1,RWHP-2)	RWHP & SST Constructed as per proposals.	NIL
4k	Specific comments of inspecting officer on waste dump management			Proposals of the R& R were implemented, O/B dumping in BF1 not possible as there non exhaust of mineral in specified location.

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Year wise Waste Dump is proposed.	As per proposal followed	NIL
5b	Area under backfilling of mined out area	2.41 Ha in plan period	BF1 not possible as there non exhaust of mineral	--
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NA	--
5d	Total area fully reclaimed and rehabilitated	No Proposal	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.			BF1 not started as the ore not exhaust in the area.

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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).	June 2022	30/06/2022	
6b	Area available for rehabilitation (ha) .	No Proposals	5.10 Ha	Carried out Coir Matt and Plantation
6c	afforestation done (ha).	No proposals	1100 plants	Plantation also done Outside, Inside& Safety zone area and gap filling
6d	No. of saplings planted during the year	No Proposals	1100 within lease area and 9000 outside the lease area	As per AR
6e	Cumulative no .of plants	--	24300 as informed by Mine Manager	As per Approved R&R



6f	Any other method of rehabilitation	No Proposals	NIL	NIL
6g	Cost incurred on watch and care during the year	No Proposals	NIL	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( L x B x D	No Proposals	NIL	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposals	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposals	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposals	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposals	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposals	Plantation done in safety zone in the lease area and gap filling plantation carried out .	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposals	NIL	NIL

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposals	NIL	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed in core and buffer zone.	Carried out as per core and buffer zone as per proposal- reports made available during inspection.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP proposals were implemented and R & R measures were also implemented

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	54.44% Fe. Reserve grade as per Mining Plan	<55% Fe ore fines have been dispatched from mine	As per AR for year 2021-22
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical sorting- crushing and screening	As per proposal	NIL
7c	Different grade of mineral sorted out at mines.	No Proposals	NIL	NIL
7d	Any beneficiation process at mines	No Proposals	NIL	NIL

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Mechanized method of crushing and screening adopted as per approved mining plan. Reserve grade achieved in the mine. <55% fines dispatched from the mine, Mineral stack observed to be stack in large quantity which is reported in AR 2021-22.
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## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	There is no top soil generated
8b	Concurrent use or storage of topsoil	Nil	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed separate dumps for Overburden & Fines	As per proposal	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	NA	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	NA	NIL

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No Proposal in FY 2021- 2022.	10.1 Ha area cumulative trees planted so far is 24300 as informed by mine manager.	NIL
8g	Survival rate	100%	90%	NIL
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on roads to control airborne dust quantity 80 KLD.	Observed during the inspection	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Quarterly Environmental monitoring study carried out in the mine lease area and other environmental problem mitigation measures are in practice at mine location.

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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 07.2022 A.R. Submitted up to 2021-22	M.R. Submitted up to 07.2022 A.R. Submitted up to 2021-22	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information furnished	Appears to be correct	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Information furnished	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	Information furnished	Appears to be correct	

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL Information furnished	Appears to be correct
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Production reported 510000 T Ore and 362400 closing stock reported in the AR 2021-22.	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Information furnished in AR- Rs. 2128/- Cost of production and Rs. 599/- Ex. Mine price.	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Information furnished	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Details furnished	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 cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

**Date :**

(Dr.OMKESHA MURTHY.M.G)

Indian Bureau of Mines