

**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 : **S006**) **SURESH PRASAD**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri. K. Madhusudhana VP (Mines&CC)
Official with
Designation
- (iv) Date of Inspection : 16/02/2022
- (v) Prev.inspection date :

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 correspondance** : **Siddapur Village**
Sandur taluk, Bellary District
Karnataka
3. (a) **Lease Number** :
- (b) **Lease area** :
- (c) **Period of lease** :
- (d) **Date of Expiry** :
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 : MSPL LTD
CO-OPERATIVE CLONY, HOSPET,
BELLARY-583203 BELLARY
KARNATAKA
Phone:
FAX :

Agent : K. MADHUSUDHANA
MSPL Limited, Baldota
Enclave Abheraj Baldota
Road, Hosapete BELLARY
KARNATAKA
Phone: 08394-232002
FAX : 08394-232444

Manager
Name : Dasharatha R
Qualification :
Appointment/ :
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	1 RC Borehole proposed. RC=34 : 660937E, 1677166N	Nil.	
1b	Exploration over lease area for geological axis 1 or 2	3 RC Bore holes proposed. RC=35 : 659933E, 1678226N RC=36 : 659862E, 1678296N RC=37 : 660850E, 1677262N	Total 4 Nos. RC Bore holes carried out. RC=34 : 660935E, 1677163N RC=35 : 659928E, 1678232N RC=36 : 659864E, 1678302N RC=37 : 660855E, 1677254N	1 RC bore hole carried out for the FY, 2019-20 & 3 RC bore holes carried out for 2020-21.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	3 Bore holes proposed	M/s. Rock Teck Enterprises.	As per the information furnished by mine management, Rs. 7.93 Lakh for 4 nos. of bore holes.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal.	Not applicable.	
1e	Balance reserve as on 01/04/20		8700600 Tonnes	As per the Annual Returns for the year 2020-21.
1f	General remarks of inspecting officers on geology, exploration etc			Total 4 Nos. of bore holes carried out as per proposal.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Development was proposed in PD-2 (E 659300-E 659700 N 1678200- N1678600) PD-3(E 659000-E 659300 N 1678700- N1679250) 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)	The development work was carried at PD-2 & PD-3.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal.	Not applicable.	
2c	Stripping ratio or ore to OB ratio	1:0.36	1:0.35	
2d	Quantity of topsoil generation in m3	No proposal.	Not applicable.	
2e	Quantity of overburden generation in m3	51580	50285.5	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development work was carried at PD-2 & PD-3. Systematic bench formations are observed.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Proposed 2 (A1, D&E Band).	2 (A1, D&E Band)	-
3b	Quantity of ROM mineral production proposed	510048 tons.	510000 tons.	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	

3d	Quantity of mineral reject generation	No proposal.	Not applicable.	No mineral reject generation as per AR 2020-21.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal.	Not applicable.	THV of Fe greater than or equal to 35%
3f	Quantity of sub grade mineral generation.	No proposal.	Not applicable.	-
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method is proposed for segregating of ROM.	Mechanized method is adopted for segregating of ROM.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	No such beneficiation study has been carried out.	-
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting Proposed for mineral benches.	Drilling & Blasting carried out for production purpose.	
3k	Provision of mining machineries in mineral benches	Yes proposed.	Deployed mining machineries.	-
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	Bench Height: 9m Bench Width: 9-10m	-
3m	Total area covered under excavation/pits	47.41Ha. (for plan period, as per the approved mining plan)	47.41Ha. (As on 01.04.2021)	Total area covered under excavation by the end of the Plan period.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.36	1:0.35	

3o	Total area put in use under different heads at the end of year	Mining- 47.41Ha. Waste dump- 13.147 Ha. Plant, buildings, residential, welfare buildings & roads - 5.150 Ha Work done under PMCP - 8.427 Ha. Others - 11.986 Ha	Mining- 47.41Ha. Waste dump- 13.147 Ha. Plant, buildings, residential, welfare buildings & roads - 5.150 Ha Work done under PMCP - 8.427 Ha. Others - 11.986 Ha	-
3p	Production of ROM mineral during the last five year period as applicable	(In tones) 2019-20 510138 2020-21 510048	(In tones) 2019-20 262400 2020-21 510000	The date of execution of ML was on 03.02.2020.
3q	General remarks of inspecting officers on method of mining etc.			Mines is being operated by deploying HEMM as per the proposal & Systematic bench formations are observed.

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.	Separate Waste Dump is maintained as per proposal.	
4b	Location of topsoil, OB and mineral reject dumps	Proposed locations: 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)	Dumping was carried out in PD-2 (E 659300-E 659700 N 1678200- N1678600) PD-3(E 659000-E 659300 N 1678700- N1679250)	

4c	Number of dumps within lease area and outside of lease area	Within Lease area 9 (8 -ID & 1- AD-1), Outside the lease area-9 (9-EID)	WML 9 (8 -ID & 1- AD-1)(OML-9 (9-EID)	-
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)	-
4e	Number of active and alive dumps.	1 Active dump, 3 Alive dumps& 1 Back Filling dump	1 Active, 3 Alive dumps.	As mineral has not exhausted from the pit. Thus, backfilling were not yet started.
4f	Number of dead dumps.	No proposal.	NIL.	
4g	Number of dumps established.	No proposal.	NIL.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed Retaining wall and garland drain for all along the dumps in approved R&R Plan	Constructed as per approved R & R proposals.	-
4i	Length of Retaining wall or garland drain all along dumps	3305m proposed as per Approved R&R Plan.	2970 m constructed.	Observed in the field.
4j	Number of settling ponds	Proposed in Approved R & R 11 (SST-2,ST-1 &RWHP-8)	Yes.	
4k	Specific comments of inspecting officer on waste dump management			Waste material dumping are being carried out in the proposed dump locations PD 2 &PD 3.

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.	BF-1(E 660800- E 661000 N 1677080- N1677250	Not yet started.	Ore has not Exhausted.
5b	Area under backfilling of mined out area	2.41 Ha.	Not yet started.	Ore has not Exhausted.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	No generation of topsoil.	-
5d	Total area fully reclaimed and rehabilitated	2.41 Ha.	NIL.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Area for backfilling has not yet matured as mineral is not exhausted fully.

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).	August 2021	6thAugust 2021	
6b	Area available for rehabilitation (ha) .	12.88Ha	14200 plants planted in outside the lease.	As per the information furnished by lessee; Total 8500 Nos. of sapling planted during the year 2020-21 as per AR.
6c	afforestation done (ha).	17.35Ha	14200 plants planted.	As per the information furnished by lessee; Outside, Inside Safety zone.
6d	No. of saplings planted during the year	5000	11150	As per the information furnished by lessee.

6e	Cumulative no .of plants	10000	14200	As per Approved R&R.
6f	Any other method of rehabilitation	No Proposal.	Not applicable.	
6g	Cost incurred on watch and care during the year	No Proposal.	Not applicable.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	2.41 Ha.	NIL.	As, Mineral has not yet exhausted fully.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	2.41 Ha.	NIL.	Mineral has not yet exhausted fully.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No Proposal.	Not applicable.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Not applicable.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal.	Not applicable.	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal.	Not applicable.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal.	Not applicable.	

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal.	Not applicable.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed in Core and Buffer zone.	Carried out as per proposal on Monthly basis.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			R & R proposal are observed to be carried out. Area for backfilling has not yet matured as mineral is not exhausted fully.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting proposed within the lease area.	Grade-wise sorting done within the lease area.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical sorting and sizing proposed.	Mechanical sorting and sizing done within the ML area.	
7c	Different grade of mineral sorted out at mines.	0-55% Fe.	0-55% Fe.	
7d	Any beneficiation process at mines	No proposal.	Not applicable.	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Mechanized method of mining adopted for mineral sorting with dry crushing & screening. Mineral stack observed to be stack in large quantity by extending the specified area; Violation issued under rule 11(1), MCDR 2017.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal.	No topsoil generated.	Working in the broken area.
8b	Concurrent use or storage of topsoil	No proposal.	Not applicable.	Proposed to work within the broken-up area for plan period.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed separate dumps for Overburden &Fines.	Separate dumps maintained as per Proposal.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB/Waste generated is proposed for back filling the mineral exhausted pit.	Nil.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicable.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	10000	14200	
8g	Survival rate	90%	90%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on roads to control airborne dust.	Water sprinkling on haul roads is observed to be carried out to control the dust generated during various mining activities.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Water sprinkling on haul roads is observed to be carried out to control the dust generated during various mining activities. Observed good aesthetic beauty in the mine area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR submitted before 10th of every month & AR submitted before 1st July of every year.	AR submitted on 30.06.2021.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Sri. Dasharatha R Geologist :Sri.Adinarayana K MiningEngineer : Muralidhar T.	Appears to be correct.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) working- 47.441ha., Used for waste disposal- 13.147ha, occupied by plant, building, residential, welfare building & roads- 5.15ha., other purpose- 11.986ha., Work done under PMCP during the year - 8.427 ha.	Appears to be correct.	
9d	Scrutiny of Annual return on afforestation	WML-1000 Nos.& 90% survival rate OML-8500	Appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil.	Nil.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening stock- 62400 Tons, Production- 510000Tons, Closing Stock- 247400 Tons Grade-wise ore Lumps: - Nil. Fines: -Below 55% 325000Tons.	Appears to be correct.	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production- Rs.1171.93/Ton Ex. Mine price- Fines Rs.333/Ton Below55% Fe.	-	Violation issued under rule 45(7).
9h	Scrutiny of Annual return on fixed assets	Rs. 34142576/- including Land, plant, machinery & transport equipment.	As annual returns submitted for the year 2020-21, furnished capitalized expenditure is not accounted for the exploration carried out during the year.	Violation issued under rule 45(7).

9k Scrutiny of Excavator-5 Appears to be correct.
Annual return on Nos., Loader-5
mining Nos.,
machineries Dumper/Tipper-
 13 Nos., Water
 Tanker-3 Nos.,
 Crushing &
 Screening-3
 Nos.,

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)	28/02/2022			
MCDR17	Rule 45(7)(a)	28/02/2022			

Date :

(SURESH PRASAD)

Indian Bureau of Mines