

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

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE-498/BNG

Mine code : 30KAR03190

- (i) Name of the Inspecting : **S19**) **SANDEEP KUMAR SINGH**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Vishwajith Gosh - GM Mines, Sandeep R Manakeshwar-Mine
Official with
Designation
- (iv) Date of Inspection : 14/06/2022
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAISINGPUR 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 : Jaisinghpura
Taluka : Sandur
Post office : Jaisinhpur
Pin Code : 583119
FAX No. : 08394232444
E-mail : mspl.mum@mspllimited.com,er
Phone : 08394232002
- (f) Police Station : Sandur is about 14 km
- (g) First opening date : 15/10/2020
- (h) Weekly day of rest : SUN
2. Address for : M/s. MSPL LIMITED, BALDOTA
correspondance ENCLAVEABHERAJ BALDOTA ROAD, HOSPET,
BALLARI 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 : 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 : Prashant Gali,Full Time
 Qualification : BE IN MINING
 Appointment/ : 15/10/2020
 Termination date

Geologist
 Name : Dhruva Kumara B.Y.,Full Time
 Qualification : M.Sc GEOLOGY
 Appointment/ : 15/10/2020
 Termination date

Manager
 Name : Sandeep R Manekeshwar
 Qualification : FCC
 Appointment/ : 26/08/2020
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 28/07/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1b	Exploration over lease area for geological axis 1 or 2	No proposal	15 boreholes drilled by the Lessee amounting to 496 metres.	As reported by Lessee during inspection.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	15 bore holes drilled by MSPL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1-34.48 ha Non-mineralized area- 21.52 ha	G1-34.48 ha Non-mineralized area- 21.52 ha	NIL
1e	Balance reserve as on 01/04/20	1.972 million tonnes as on 31.03.2020. (1.603 million tonnes with grade +45% & 0.369 million tonnes with grade +35%.	1851092 tonnes of balance reserves as on 1.04.2022	As on 1.04.2022.
1f	General remarks of inspecting officers on geology, exploration etc			No exploratory proposals for the year 2021.22. 1,851,092 tonnes of balance reserves as on 1.04.2022

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	2021-22: E 657825 to E 658400 N 1679460 to N 1679780 (Sec AA' to EE') Top-900 mRL Bottom-870 mRL	It is proposed that mine development for the year 2021-22 will be carried out between Sec A-A' to E-E', 3 Nos. of benches with top 900 mRL and bottom 870 mRL. It is found during inspection that at certain section likes D-D', the benches have been developed beyond the proposed vertical limit of 870 mRL i.e., till 853 mRL.	Violation issued under Rule 11(1) of MCDR 2017.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in overburden and Mineral.	Separate benches maintained in overburden and Mineral.	10-meter bench height for both overburden and mineral in reef working.
2c	Stripping ratio or ore to OB ratio	1:0.61 (in tons)	1:8.50 (in tons)	Ore:50720 Waste:431140. More waste handled due to presence of intermittent Inter-burden layers.
2d	Quantity of topsoil generation in m3	No proposal	NIL	NIL
2e	Quantity of overburden generation in m3	29224 Cum~73061 tons	172456 Cum ~ 431140 tons.	As reported by Lessee during inspection.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	It is proposed that mine development for the year 2021-22 will be carried out between Sec A-A' to E-E', 3 Nos. of benches with top 900 mRL and bottom 870 mRL. It is found during inspection that at certain section likes D-D', thebenches have been developed beyond the proposed vertical limit of 870 mRL i.e., till 853 mRL. Violation issued under Rule 11(1) of MCDR 2017.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit proposed	Actual working carried out in one pit	Reef
3b	Quantity of ROM mineral production proposed	120000 tons ROM proposed	50720 tons ROM achieved	NIL
3c	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 / Mechanised method adopted for segregating from ROM	Mechanized method to be used for segregating of ROM Proposed: Screen: Specs-150TPH Output Size 0-10mm(Fines) 10-40mm(Lumps) >40mm (Oversize) Crusher: Specs-100TPH Feed Size-300mm Output Size- 0-10mm (Fines) 10-40mm (Lumps)	Mechanized method is used for segregating of ROM Screen: Specs-150TPH Output Size 0-10mm(Fines) 10-40mm(Lumps) >40mm (Oversize) Crusher: Specs-100TPH Feed Size-300mm Output Size- 0-10mm (Fines) 10-40mm (Lumps)	Screen & Crusher used for segregation of ROM
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed (20 % where hard patches encountered)	Drilling and blasting carried out in hard strata Hired Wagon Drilling Machine Specs- 4.0" Drill Diameter Blasting Materials Used: Specs: Solar Prime(83mm) Solar Fuse(Cordex) Relay, Cord Safety Fuse Detonator	NIL
3k	Provision of mining machineries in mineral benches	Yes Machinery Proposed: Excavator (190 TPH,200TPH,40T PH)-5 nos. Tippers-10 tons-5nos Drill-1 no. Water tanker-2 nos.	Machineries deployed Excavator (1.6 Cum, 1.2 Cum)- 5 nos. Tippers- 10 tons- 10 nos. Drill- 1 no. Water tanker- 8 KL-1no. Wheel loader- 2nos.	As reported by the Lessee during inspection.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10 m bench height proposed for both OB & mineral.	10 m bench height maintained for both OB and mineral	For Reef working.
3m	Total area covered under excavation/pits	15.43 ha till end of plan period	14.88 Ha	As reported by Lessee during inspection
3n	Ore to OB ratio for the pit/mine during the year.	1:0.61	1:8.50	
3o	Total area put in use under different heads at the end of year	Mining-15.43 ha Waste dump(Active-AD-1)-5.38 ha Infra & roads-0.55 ha (Till end of plan period 31.03.2025)	Mining-14.88 ha Waste dump (Active-AD-1)-2.90 ha Infra & roads- 0.99 ha	As reported by Lessee during inspection.
3p	Production of ROM mineral during the last five year period as applicable	2020-21:120000 2021-22:120000 (in tonnes)	2020-21:70348 2021-22:50720 (in tonnes)	NIL
3q	General remarks of inspecting officers on method of mining etc.			It is proposed that mine development for the year 2021-22 will be carried out between Sec A-A' to E-E', 3 Nos. of benches with top 900 mRL and bottom 870 mRL. It is found during inspection that at certain section likes D-D', thebenches have been developed beyond the proposed vertical limit of 870 mRLi.e. till 853 mRL. Violation issued under Rule 11(1) of MCDR 2017.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping for OB proposed.	Separate dumping for OB maintained.	AD-1 waste dump.
4b	Location of topsoil, OB and mineral reject dumps	E 657900 to E 658020 N 1679220 to N 1679330 (AD-1 waste dump)	It was observed during site inspection that waste dumping at South western portion of the waste dump AD-1 between Sec C-C' & D-D' is carried out beyond the proposed extent. Also, at the Northern portion of the dump AD-1(N-1679400, E-658000), waste dumping has been carried out beyond the proposed extent. The waste dumping has not been carried out as per the proposal.	Violation issued under Rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	8 inactive dumps (ID-1, ID-2, ID-3, ID-4, ID-5, ID-6, ID-7, SBM dump) & 1 Active Dump (AD-1).	8 inactive dumps(ID-1, ID-2, ID-3, ID-4, ID-5, ID-6, ID-7, SBM dump) & 1 Active Dump (AD-1).	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Present active dump AD-1 outside UPL.	Present active dump AD-1 outside UPL.	NIL
4e	Number of active and alive dumps.	1-Active Dump	1-Active Dump	AD-1
4f	Number of dead dumps.	8 dead dumps	8 dead dumps	8 dead dumps (ID-1, ID-2, ID-3, ID-4, ID-5, ID-6, ID-7 and SBM dump).
4g	Number of dumps established.	No Proposal	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	80 m RW & 80 m GD proposed along dump AD-1.	The Retaining wall and Garland drain construction carried at Active dump AD-1 as per the proposal.	NIL
4i	Length of Retaining wall or garland drain all along dumps	80 m RW & 80 m GD proposed along dump AD-1.	The Retaining wall and Garland drain construction carried at Active dump AD-1 as per the proposal.	NIL
4j	Number of settling ponds	No proposal	NIL	NIL

4k	Specific comments of inspecting officer on waste dump management	It was observed during site inspection that waste dumping at South western portion of the waste dump AD-1 between Sec C-C' & D-D' is carried out beyond the proposed extent. Also, at the Northern portion of the dump AD-1(N-1679400, E-658000), waste dumping has been carried out beyond the proposed extent. The waste dumping has not been carried out as per the proposal. Violation issued under Rule 11(1) of MCDR 2017.
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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	NIL
5b	Area under backfilling of mined out area	No Proposal	NIL	NIL
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	1.00 Ha of afforestation on the float ore mined out area proposed.	1.00 ha afforestation carried out as per the proposal.	NIL

5e General remarks of inspecting officers on backfilling and reclamation etc. No specific comments.

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).	To be submitted before 1st of July every year.	Annual PMCP report for the year 2021-22 yet to be submitted on the date of inspection.	NIL
6b	Area available for rehabilitation (ha) .	1 Ha backfilled area.	1 Ha backfilled area.	Float ore mined out area.
6c	afforestation done (ha).	1 Ha backfilled area.	1 Ha backfilled area.	Float ore mined out area.
6d	No. of saplings planted during the year	2000 nos. of saplings proposed.	Around 5000 saplings planted in float worked out area, safety zone and gap plantations.	NIL
6e	Cumulative no .of plants	15,700 nos. of plants cumulative.	5200 nos. of plants cumulative.	As reported by the Lessee during inspection.
6f	Any other method of rehabilitation	No proposal	NIL	NIL
6g	Cost incurred on watch and care during the year	Rs. 40000 proposed for watch and care.	As per proposal.	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal for 2021-22	NIL	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	NIL	NIL

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Afforestation on 1 Ha backfilled area of Float ore mined out area proposed	Afforestation carried in 1 Ha backfilled area of float ore mined out area as per the proposal.	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	NIL	NIL
6l	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
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposal	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	NIL	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular Environmental Monitoring of Core and Buffer zone is proposed.	Environmental Monitoring of Core and Buffer zone is being carried out. Environmental monitoring report of Feb-22 available. All parameters within limit.	Parameters which are being Monitored: (Air, Noise, Surface water quality, Ground water etc.)
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The PMCP proposals implemented inside the mine as per the proposal.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Mechanized method to be used for segregating of ROM Proposed: Screen: Specs-150TPH Output Size 0-10mm(Fines) 10-40mm(Lumps) >40mm (Oversize) Crusher: Specs-100TPH Feed Size-300mm Output Size- 0-10mm (Fines) 10-40mm (Lumps)	Mechanized method is used for segregating of ROM Screen: Specs-150TPH Output Size 0-10mm(Fines) 10-40mm(Lumps) >40mm (Oversize) Crusher: Specs-100TPH Feed Size-300mm Output Size- 0-10mm (Fines) 10-40mm (Lumps)	Crushing and screening carried out with in the lease area.
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 sorting proposed.	Lumps 55-58 % Fe 58-60 % Fe Fines 55-58 % Fe 58-60 % Fe	NIL
7d	Any beneficiation process at mines	No proposal	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation activities carried out inside the mine as per the proposal.

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)	Proposed separate dump for Overburden.	Separate dump maintained as per Proposal.	AD-1
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NIL	NIL
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)	15,700 nos. of plants cumulative.	5200 nos. of plants cumulative.	As reported by the Lessee during inspection.
8g	Survival rate	80 % Proposed	80% achieved	As reported by the Lessee during inspection.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on roads to control airborne dust.	Water sprinkling done regularly to control airborne dust.	Water tanker-8KL-1 no. to control airborne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mines looks good.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2022 on 07.06.2022 ***** A.R. Submitted up to 2020-21 on 30.06.2021		NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9d	Scrutiny of Annual return on afforestation	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9h	Scrutiny of Annual return on fixed assets	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL
9k	Scrutiny of Annual return on mining machineries	Annual Return for the year 2021-22 yet to be submitted on date of inspection.	NIL	NIL

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)	04/07/2022			

Date :

(SANDEEP KUMAR SINGH)

Indian Bureau of Mines