

MCDR INSPECTION REPORT 2023-24

SL. No	Particulars	Detail
1	Name of the Mine	Karadikolla Iron Mines of M/s MSPL Limited
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land-86.059 Ha as per deed 86.12 Ha as per CEC Non-Forest Land - Nil
3	Minecode	30KAR03187
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/199/2011
5	Name of the lessee, Address, phone, email and fax number	M/s MSPL Limited Baldota Enclave, Abheraj Baldota Road Hosapete-583203 Vijayanagara Dist Phone-08394232002 Fax:08394-232333 email@mspllimited.com
6	Village	Siddapur
7	Taluk/ Mandal	Sandur
8	District	Ballari
9	Pincode	583119
10	State	Karnataka
11	Post office	Susheela Nagar
12	Nearest police station	Sandur
13	Nearest Railway station	Hospet (24 KM)
14	Date of Grant of Mining Lease	03.02.2020
15	Date of Execution	01.02.2020
16	Date of opening of Mine	12.03.2020
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Dr Meda Venkataiah Baldota Enclave, Abheraj Baldota Road Hospete Phone-9900256797 meda.venkataiah@mspllimited.com Fax:08394-232333
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri K. Madhusudhana Baldota Enclave, Abheraj Baldota Road Hosapete Phone-9900256759 madhusudhan.k@mspllimited.com Fax:08394-232333
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri Dasharatha.R Baldota Enclave, Abheraj Baldota Road Hosapete Phone-9886690485 dasharatha.r@mspllimited.com Fax:08394-232333 Date of appointment: 12.03.2020
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri Kishore.S B.E in Mining 5 Years 03 months. Baldota Enclave, Abheraj Baldota Road Hosapete Phone-9535454586 Fax:08394-232333 Date of appointment:17.07.2024

24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Sri. Veeresh Kumar K J Baldota Enclave, Abheraj Baldota Road Hosapete Expierence: 15 Years Veeresh.kj@mspllimited.com Fax:08394-232333 Date of appointment: 30.08.2024
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Letter No. 279/1094/2017/BNG/589 Dated: 24.10.2017 RUMP Letter No. MCDR-MPCOFE/23/2023-BNG_IBM_RO_BNG Dated:14.02.2024
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Vide Letter No. 279/1094/2017/BNG/589 Dated: 24.10.2017
27	Mineral(s) granted in lease and proved for mining	Iron Ore
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	A-Category Mines Fully Mechanized
30	Captive/ Non captive	Captive Mines
31	Date of inspection	30.12.2024
32	Name of accompanying mine officials with designation	Sri. Vishwajit Ghosh - Senior General Manager Mines Sri. Prashant Laharia - GM-Exploration Sri. Dasharatha.R - Mines Manager Veeresh Kumar K J - Geologist Santosh Shiraganvi - Mining Engineer

1. Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	-
1b	Exploration over lease area for Geological axis 1 or 2.	NIL	15 RC Boreholes Total of 854 M	As per approved RUMP dated 14.02.2024 Area under different categories of exploration is as follows: G1: 17.29Ha, G2: 0.48Ha, G3&G4: Nil and Area under non-mineralized zone: 68.29Ha
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NIL	Drilling Out Sourced to Rock Teck Enterprises Rs. 44,92,732/-	Expenditure Amount as per the Annual Return 2023-24
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	As per approved RUMP dated 14.02.2024 Area under different categories of exploration is as follows: G1: 17.29Ha, G2: 0.48Ha, G3&G4: Nil and Area under non-mineralized zone: 68.29Ha
1e	Balance reserves as on 31.03.2024		15.980946 MMT	Actual As per the Annual Return 2023-24

1f	General remarks of inspecting officer on geology, exploration etc.	Based on the drilling carried out, lessee has updated the reserve/resources in the approved RUMP dated 14.02.2024. Further lessee has assessed the reserve/resources as per threshold value and included as silicious hematitic ore (HSIO) in the reserve/resources. Lessee as explored the mineralized area laterally under G1/G2 level. In the approved RUMP lessee has proposed additional 09 no. of core boreholes to explore small portion G2 area under G1also to explore the ore body 3-dimesnioally where the boreholes ended in mineralized zone.
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2. Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	E 659000 to 660200 N 1677800 to 1679200 S6 to S12 E 660600 to 661200 N 1676700 to 1677400 S23 to S29	E 659000 to 660200 N 1677800 to 1679200 S6 to S12 E 660600 to 661200 N 1676700 to 1677400 S23 to S29	Development carried out within the proposed extent.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Maintained separate benches for O/B	Maintained separate benches for O/B	
2c	Stripping ratio or ore to OB ratio	1:0.44 Ore: 141720 Cu.m OB: 63030 Cu.m	1:0.39 Ore: 141666 Cu.m OB: 56563 Cu.m	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	63030 cum 126060 tons	56563 cum 113126 tons	B.D for Waste 2 .0 ton/cum
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Lessee has carried out the development systematically as per the proposal.		

3. Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	2 (A1, D&E Band)	2 (A1, D&E Band)	
3b	Quantity of ROM mineral production proposed	510192 tons	510000 tons	Mined upto CEC approved limit
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No proposal	Nil	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method - Crushing & Screening	Mechanized method - Crushing & Screening	Screen 2no's of 180 TPH used for segregating

				from ROM
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	
3j	Provision of drilling & blasting in mineral benches	Drilling and Blasting Proposed in hard strata Blasting Materials used: Slurry, Delay Detonators, Cord Relays Charge Density-3.5 Kg/m in Ore & BHQ 3 Kg/m in OB	Drilling and Blasting carried out in hard strata as per proposal.	Explosive consumed during the year is 14050 kg.
3k	Provision of mining machineries in mineral benches	Machinery Proposed: SHOVEL 1.60 cum - 2 SHOVEL 1.20 cum - 2 SHOVEL 0.85 cum - 1 Wheel Loader 1.60 cum - 5 Tippers: 25tonnes -12 Water Tanker 9000 lit -3 Screening 180TPH - 2 Crushing 100 TPH-02	Machinery Deployed: SHOVEL 1.60 cum - 2 SHOVEL 1.20 cum - 2 SHOVEL 0.85 cum - 1 Wheel Loader 1.60 cum - 5 Tippers: 25tonnes -12 Water Tanker 9000 lit -3 Screening 180TPH - 2 Crushing 100 TPH-02	
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	Bench dimension nearly maintained.
3m	Total area covered under excavation/pits	Mining Pit - 30.89 Ha.	Mining Pit - 44.73Ha.	The difference in area is due to some old pits of erstwhile lessee ha not been updated. Same is updated in the RUMP approved on 14.02.2024.
3n	Ore to OB ratio for the pit/mine during the year	1:0.60 - cum 1:0.24 - Tons	1:0.50 - cum 1:0.22 - Tons	
3o	Total area put in use under different heads at the end of year	Mining Pit - 30.89 Ha. Waste disposal- 25.60 Ha Infrastructure & Roads 6.22 Ha Other Purpose-23.41 Ha	Mining Pit - 44.753 Ha. Waste disposal- 18.052 Ha Infrastructure & Roads 4.103 Ha Other Purpose-19.151 Ha	Actual area details as per approved RUMP dated 14.02.2024.

3p	Production of ROM mineral during last five-year period, as applicable	2019-20: 510138 2020-21:510048 2021-22:509940 2022-23:510084 2023-24:510192 (in tonnes)	2019-20:262400 2020-21:510000 2021-22:510000 2022-23:510000 2023-24:510000 (in tonnes)	Production data from Annual Returns.
3q	General remarks of inspecting officer on method of mining etc.	Lessee has carried out mechanized mining with crushing & screening of ROM as per proposal.		

4. Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate Waste Dump is proposed	Separate Waste Dump is maintained as per proposal	
4b	Location of topsoil, OB & mineral reject dumps	Proposed OB 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)	Actual OB dumps PD-2 (E 659300-E 659700 N 1678200-N1678600) PD-3 (E 659000-E 659300 N 1678700-N1679250) BF-1 - NIL	Proposed dumping (backfilling) of BF-1 not carried out due to mineral not exhausted in the proposed area for backfilling.
4c	Number of dumps within lease area and outside lease area	WML 13 (ID-7, AD-1,PD-3,BHQ/SG-1 & BF-1) OML-9 (EID-9)	WML 13 (ID-7, AD-1,PD-3,BHQ/SG-1 & BF-1) OML-9 (EID-9)	
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 & alive dumps	1 Active, 3 Alive dumps & 1 Back Filling dump	1 Active, 2 Alive dumps, 1 TD	BF -1 is not because mineral is not exhausted.
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	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	Constructed as per approved R & R proposals.	
4i	Length of Retaining wall or garland drain all along dump	269 m proposal (1064 m for Five year)	Garland Drain-460 m Retaining Wall – 690 m	

			were constructed.	
4j	Number of settling ponds	No proposal	Not applicable.	All proposed structures were constructed as per Approved R&R plan
4k	Specific comments of inspecting officer on waste dump management.	Lessee has taken adequate measures viz. construction of toe wall, garland rain, coir matting to stabilize the dumps.		

5. Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	2.41 Ha	Not Done	Proposed backfilling (BF - 1) is not carried out due to mineral is not exhausted. In the approved RUMP dated 14/02/2024 lessee has proposed backfilling in the said area in the year 2028-29.
5b	Area under backfilling of mined out area	No proposal	Not applicable.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	NA	NA	
5d	Total area fully reclaimed & rehabilitated	No proposal	Not applicable.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	In the Proposed backfilling (BF -1) mineral is not exhausted. In the approved RUMP dated 14/02/2024 lessee has proposed backfilling in the said area in the year 2028-29.		

6. Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	June 2024	29/06/2024	Yes, submitted within stipulated time.
6b	Area available for rehabilitation (ha)	No proposal	NIL	
6c	Afforestation done (ha)	No proposal	Plantation carried out in the safety zone	Outside, Inside& Safety zone
6d	No. of saplings planted during the year	Safety Zone – No Proposal OML – No Proposal (MP PMCP)	Safety Zone - 1100 OML – 5000	Plantation nos. As reported by lessee team during the inspection.
6e	Cumulative no. of plants	No proposal	40400 saplings	As reported by lessee team during the inspection.
6f	Any other specific method of rehabilitation	-	-	

6g	Cost incurred on watch & care during the year	No Proposal	Rs. 20,99,655/- (CSR Expenditure)	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	2.41Ha proposed for backfilling	Backfilling not done	Backfilling not done due to mineral not exhausted in the proposed area.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	No Proposal	Not applicable.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the 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 rehabilitated (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 & buffer zone)	Proposed in core and buffer zone	Carried out as per core and buffer zone as per proposal	
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Lessee has not carried out the proposed backfilling due to mineral not exhausted in the proposed area. Other PMCP activities undertaken as per approved document. Lessee also constructed Toe wall and garland drain for old (erstwhile lessee) dumps as per approved R & R Plan.		

7. Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	100% fines proposed		
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Crushing and screening		
7c	Different grade of mineral sorted out at mines	Fines proposed	Lumps : Nil Fines : Fe 45% to below 51% Fe 51% to below 55%	
7d	Any beneficiation process at mines	No proposal	Nil	Only crushing and screening done at mine site
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	In the last approved RUMP dated 14/02/2024, lessee has considered Hematitic silicious ore-HSIO (Fe 35% to 45%) under Reserves and proposed utilization of HSIO by blending with high grade iron ore. The		

		proposed practice is good from point of conservation of minerals.
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8. Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	There is no top soil generated	Mine working is in broken up area, no top soil generated during the year.
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed separate dumps for Overburden & Mineral stacks	Separate dumps for Overburden & Mineral stack maintained as per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	42960 cum waste proposed for backfilling in 2.14 Ha of mine pit.	Not carried out	Proposed backfilling not carried due to mineral not exhausted in the proposed area.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	2.14 Ha proposed for back filling	Not carried out	Proposed backfilling not carried due to mineral not exhausted in the proposed area.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No proposal	1100 plants within the lease during the year 2023-24	
8g	Survival rate	No proposal	90%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on roads to control airborne dust	Water Sprinklers implemented for suspension of dust	Using water tankers
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	This mine is C-category auctioned mine. Lessee has taken-up plantation and other R & R measures to improve the aesthetic beauty of the mine. The mine is surrounded by natural vegetation (forest) and aesthetic beauty in and around mine is good.		

9. Compliance of Rule 45(7)

S.N.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-	Monthly & Annual Returns submitted within stipulated time.	M.R. Submitted up to 09.12.2024 A.R. Submitted up to 2023-24 (29.06.2024)
S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Muralidhar T Geologist: Adinarayana K Manager: Dasaratha T.	At the time of inspection following officers were present Mining Engineer: Kishore S Geologist: Veeresh KJ Manager: Dasaratha T.	As per Rule 46 of MCDR, 2017, lessee has submitted the Form-H regarding termination & appointment of Mining Engineer and Geologist.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under OC working : 44.753Ha Waste dump: 18.052 Infrastructure: 4.103 Other purpose: 19.151	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	1100 saplings	Appears to be correct	Plantation in the safety zone observed during inspection
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: 462476 tonnes Lumps : Nil Fines : Fe 45% to below 51% : 168007 tonnes Fe 51% to below 55% : 127686 tonnes	Appears to be correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale value : nil (Captive use) Ex. Mine price: 192.58 Production cost: 2702.55 (including BID premium)	Rs. 124.64 considered under Beneficiation, however, there is no beneficiation activity in the lease area. Depreciation cost considered was not tallying with figures given in Part-II A (1) of Annual Return. Cost incurred towards exploration was not considered while calculating the Cost of Production	Showcause notice issued under Rule 45(7) of MCDR, 2017

Details of violations observed during current inspection and compliance position of violation pointed out

<u>Violation observed</u>			<u>Show cause position</u>		
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance on
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डॉ. सुधाकर टी.एल. / Dr. Sudhakara T. L.)
वरिष्ठ खनन भूविज्ञानी / Senior Mining Geologist