

MCDR INSPECTION REPORT (2023-24)

S. N.	Particulars	Details
1	Name of the Mine	S.M.Block Iron Ore Mine, M.L.No.2505
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	40.47 Ha. Forest Land
3	Mine code	30KAR03154
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/211/2011
5	Name of the lessee, Address, phone, email and fax number	M/s.M.Hanumantha Rao, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Ballari-583101, 08392260170, mhraomines@gmail.com & 08392260269
6	Village	Narayanapur
7	Taluk/Mandal	Sandur
8	District	Ballari
9	Pincode	583119
10	State	Karnataka
11	Post office	Devagiri
12	Nearest police station	Torangallu
13	Nearest Railway station	Torangallu
14	Date of Grant of Mining Lease	09-03-2005
15	Date of Execution	12-12-2005
16	Date of opening of Mine	15-05-2006
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	Shri. Arun Kumar Chirania, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Ballari-583101, 08392260170, mhraomines@gmail.com , 08392260269
21	Name of the Mine Agent with Address, phone, email, fax	Shri. Arun Kumar Chirania, H.No.37, W.No.17, Ground Floor, Main Road,

	number and date of appointment	Near Park, Patel Nagar, Ballari-583101, 08392260170, mhraomines@gmail.com , 08392260269
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri. K.Venkatasreedhar, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Ballari-583101, 9480400642, venkatasreedhark@gmail.com & DOA : 30-04-2018
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri. M.V.Mahesh, B.Tech in Mining, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Ballari-583101, 9481568072, maheshmv71@gmail.com & DOA : 03-10-2017
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri. C.Nagabushana, MSC in Geology, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Ballari-583101, & DOA : 03-10-2017
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	03-02-2021
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	01-06-2022
27	Mineral(s) granted in lease and proved for mining	Iron ore
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/ Non captive	Non captive
31	Date of inspection	05-09-2024
32	Name of accompanying mine officials with designation	M.S.Raju – QP Consultant K.Venkatasreedhar – Mines Manager, M.V.Mahesh – Mining Engineer M.Ramesh - Geologist

Exploration

S.N	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	4 holes Proposed during the year 2022-23	4 holes drilled	Due to steep terrain not possible to undertake in the previous year plan period.
1b	Exploration over lease area for Geological axis 1 or 2.	G2 to G1		
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposal	Sree Krishna Borewells & Rs.275000.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Na	
1e	Balance reserves as on <u>31.03.2023</u>	Nil	4979026 tonnes	As per Annual Return Submitted for the year 2023-24.
1f	General remarks of inspecting officer on geology, exploration etc.	Entire lease area explored to G1 axis as per MEMC 2015.		

Development

S.N	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Eastern pit N1657770 – N1658275, E680250 – E680560 & Western pit N1657750 – N1657950, E680060 –	Eastern pit N1657840 – N1658275, E680250 – E680560	No work carried out in the Western pit as per the approved MP, due to Eastern pit not

		E680340		exhausted for backfilling of western pit overburden . Since the rectification proposals are in the proposed RUMP and the document is submitted with this reason and to comply with the modified approved R & R, so no violation issued.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches proposed in overburden and mineral	Same has been maintained by and large	
2c	Stripping ratio or ore to OB ratio	1:6.5	1:4.04	Due to change in working location to exhaust eastern pit to comply with R&R plan.
2d	Quantity of topsoil generation in m3	No Proposal	Nil	-do-
2e	Quantity of overburden generation in m3	733450	404724	in line with quantity

				indicated in the AR.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	No work carried out in the Western pit as per the approved MP, due to Eastern pit not exhausted for backfilling of western pit overburden. Since the rectification proposals are in the proposed RUMP and the document is submitted with this reason and to comply with the modified approved R & R.		

Exploitation

S.N	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	2 pit proposed for production	1 pit for production	Due to change in working location to exhaust eastern pit to comply with R&R plan.
3b	Quantity of ROM mineral production proposed	226000 tonnes	214000 tonnes	
3c	Recovery of salable/usable mineral from ROM production	226000 tonnes	214000 tonnes	
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	Mechanised method proposed for segregating from ROM	As per proposals in the Approved MP	Dry Crushing & Screening, Capacity of plant is 140 TPH
3i	Any analysis or	No Proposal	Nil	Magnetitic ore

	beneficiation study proposed & carried out for sub-grade mineral and reject			beneficiation study carried out by CSIR-IMMT Bhubaneswar in the past.
3j	Provision of drilling & blasting in mineral benches	Provision made for drilling & blasting in mineral benches.	As per proposed in the Approved MP	115 mm drilled Dia with 3mts spacing & 2.5mts burden with 10mts depth. Nonel in conjunction with slurry explosive is used for blasting.
3k	Provision of mining machineries in mineral benches	Excavator & Tipper combination proposed.	As per proposed in the Approved MP	Machineries deployed Excavator : 09 Nos, Tippers : 16 Nos, Loaders : 03 Nos and water tankers : 02 Nos.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height of 10 mts and width 10 mts is proposed.	Maintained bench parameters by and large as proposed in the approved Mining Plan.	
3m	Total area covered under excavation/pits	11.98 Ha at the end of plan period.	12.22 Ha at the end of reporting year	Due to change in working location to exhaust eastern pit to comply with R&R plan.

3n	Ore to OB ratio for the pit/mine during the year	1:6.5	1:4.04	-do-
3o	Total area put in use under different heads at the end of year	Area Under Mining: 11.98 Ha, Over Burden Dumps: 12.43 Ha, Mineral Storage: 1.54Ha, Roads: 2.00 Ha, Green Belt: 2.14 Ha, Mineral Separation Plant: 0.50 Ha, at the end of plan period.	Area Under Mining: 12.22 Ha, Over Burden Dumps: 12.44Ha, Mineral Storage: 2.08Ha, Roads: 2.27 Ha, Green Belt : 2.14 Ha, Mineral Separation Plant: 0.25 Ha, at the end of reporting year	Nominal deviation due to change in working location to exhaust eastern pit to comply with R&R plan.
3p	Production of ROM mineral during last five-year period, as applicable	2019-20: 144000 2020-21: 144000 2021-22: 226000 2022-23: 226000 2023-24: 226000 (in tonnes)	2019-20: 143990 2020-21: 143990 2021-22: 156150 2022-23: 201000 2023-24: 214000 (in tonnes)	
3q	General remarks of inspecting officer on method of mining etc.	Proposed production as per the CEC limit has been achieved in almost all the years		

Solid Waste Management-Dumping

S.N	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of OB	Maintained as per approved	

		proposed.	Mining Plan	
4b	Location of topsoil, OB & mineral reject dumps	Location of OB N1657780 to N1657980, E680415 to E680640	Location of OB N1657800 to N1658020, E680520 to E680715.	Nominal deviation due to change in working location to exhaust eastern pit to comply with R&R plan.
4c	Number of dumps within lease area and outside lease area	Within the lease area -5 Nos, Outside ML area : Nil	As per the approved Mining Plan	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary dumps proposed within the UPL.	As per the approved Mining Plan	
4e	Number of active & alive dumps	Active dumps - 1	Active dumps - 1	
4f	Number of dead dumps	Dead dumps- 4	Dead dumps- 4	Nil
4g	Number of dumps stabilized	2	2	Stabilized by coir matting & plantation.
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Retaining wall & garland drain done all along the dump.	
4i	Length of Retaining wall or garland drain all along dump	Nil	Retaining wall -150m & garland drain - 660m	As per CEC approved
4j	Number of settling ponds	No Proposal	Nil	
4k	Specific comments of inspecting officer on waste dump	Dump management is satisfactory		

	management.	
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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	Part of Eastern pit	Not reached full depth	Due to change in working location to exhaust eastern pit to comply with R&R plan.
5b	Area under backfilling of mined out area	Temporary Backfilling in eastern pit	Not reached full depth	Due to change in working location to exhaust eastern pit to comply with R&R plan.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal	Nil	
5d	Total area fully reclaimed & rehabilitated	No Proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Temporary backfilling not carried out due to change in working location to exhaust eastern pit to comply with R&R plan.		

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.	Annual report on PMCP submitted on time and correctly.	Yes Submitted.	Date of submission 27-06-2024
6b	Area available for	No Proposal	Nil	

	rehabilitation (ha)			
6c	Afforestation done (ha)	Area of 0.15 Ha	0.20 Ha	
6d	No. of saplings planted during the year	300 Nos	787 Nos	Dump plantation
6e	Cumulative no. of plants	Total 30361 Nos	Total 30980 Nos	Plantation carried out with in ML area, overall survival rate of 57%.
6f	Any other specific method of rehabilitation	No Proposal	Nil	It is proposed reclaim & rehabilitate dumps after is maturity during the conceptual stage a total area of 40.47 Ha is proposed to be afforested as apart of reclamation.
6g	Cost incurred on watch & care during the year	Rs. 112000	Rs. 236100	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	No Proposal	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	No Proposal	Nil	
6j	Compliance on reclamation and rehabilitation by	No Proposal	Nil	

	backfilling (iii) Afforestation on the backfilled area			
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No Proposal	Nil	
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No Proposal	Nil	
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	No Proposal	Nil	
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No Proposal	Nil	
6p	Compliance of Environmental monitoring (core zone & buffer zone)	9 Air Monitoring stations (core zone 5 stations & buffer zone 4 stations), 9 Water sampling stations (Surface water sample 1 & Ground water 8 samples), 6 Noise Monitoring stations (core zone 1 stations & buffer zone 5 stations), 5 Soil sampling stations (core	Reports are received	

		zone 1 station & buffer zone 4 stations)		
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The compliance of proposed PMCP activities are found to be satisfactory and Monitoring of Environmental parameters are done regularly.		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Sorting within lease area	As per approved mining plan crushing, screening and sorting done.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Dry crushing & Screening.
7c	Different grade of mineral sorted out at mines	45%Fe - 51%Fe 51%Fe - 55%Fe 55%Fe - 58%Fe 58%Fe - 60%Fe 60%Fe - 62%Fe	45%Fe - 51%Fe 51%Fe - 55%Fe 55%Fe - 58%Fe 58%Fe - 60%Fe 60%Fe - 62%Fe	Nil
7d	Any beneficiation process at mines	No	No	Nil
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mineral Conservation is taken place in the mine satisfactorily		

Environment

S. N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	No top soil generated.	Nil
8b	Concurrent use or storage of topsoil	No Proposal	No top soil generated.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Temporary dumping is proposed	As per the proposal maintained	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Not Proposed	NA	Nil
8g	Survival rate	Not Specified	60%	
8h	Water sprinkling on roads to control airborne dust	Proposed for Water sprinkling on roads to control airborne dust	As per approved MP proposal	2 Nos of water tankers are deployed.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in & around the mine is good. Lessee has carried out afforestation, sprinkling on haulage roads, crusher & other protective measures are carried out regularly as per the proposals in the approved MP.		
Compliance of Rule 45				
S. N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to 09-08-2024 A.R. Submitted up to 2023-24 on 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 – M.V.Mahesh Geologist – M.Ramesh Manager – K.V.Sreedhar	Present officers accompanied during the inspection.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered current workings – 12.22Ha. Used for waste disposal – 12.44Ha. Occupied by plant, buildings, residential, welfare buildings & roads – 2.52Ha. Other purpose (Mineral storage, Green	Appears to be correct.	

		Belt) – 4.22 Ha.		
9d	Scrutiny of Annual return on afforestation	Number of trees planted – 787, Survival rate in percentage – 60%	Appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No Proposals		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM opening Stock 97200 tonnes, Production 214000 tonnes and Closing Stock 98200 tonnes.	Appears to be correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale value Rs.757308713 , EX mine Price as per grade wise for Lumps 45-51%Fe : Rs.1330.33 Fines: 45-51%Fe :Rs.1127.46, 51-55%Fe : Rs.4176.82, 55-58%Fe : Rs.4621.69, 58-60%Fe : Rs.5068.44, 60-62%Fe : Rs.4280.42 and Production	Appears to be correct.	

		cost per ton Rs.1855.88		
9i	Scrutiny of Annual return on fixed assets	Rs.65549557	Appears to be correct.	
9k	Scrutiny of Annual return on mining machineries	<ol style="list-style-type: none"> 1) Back hoe – 0.9 m³ – 1No. 2) Back hoe – 1.90 m³ – 1No. 3) Back hoe – 1.40 m³ – 1Nos. 4) Back hoe – 1.60 m³ – 3No. 5) Back hoe – 1.20 m³ – 3No. 6) Wheel loader – 2.50 m³ – 3Nos. 7) Tipper – 16 m³ – 12Nos. 8) Tipper – 14 m³ – 4Nos. 9) Drills – 100 mm dia – 1 No. 10) Mobile screener – 200tph – 1 No 11) Mobile crusher – 150tph – 2 Nos 12) Air Compressor 	Appears to be correct.	

		- 14 Cu.m / Min - 1No 13) Water tanker - 8000 liter - 2No.		
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ओमकेशा मूर्ति एम.जी. | **OMKESHA MURTHY M.G.**
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