

MCDR INSPECTION REPORT**General**

S.N.	Particulars	Details
1	Name of the Mine	Dubiyara Iron Ore Mine
	Date of Inspection:	14/08/2023
	Name of Inspecting Officer	Ibrahim Sharief
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	32.37 Ha
3	Mine code	30MPR1800314.
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/766/2011
5	Name of the Lease, Address, Phone, email and fax number	M/s NIRMALA MINERALS
6	Village	Dubiyara
7	Taluka/Mandal	SIHORA ,MAGHAGAON
8	District	JABALPUR
9	Pin code	483501
10	State	MADHYA PRADESH
11	Post Office	Tikariya
12	Nearest Police Station	483334
13	Nearest Railway Station	Sihora
14	Date of Grant of Mining Lease	
15	Date of Execution	06.03.1987
16	Date of opening of Mine	06.03.1987
17	Date of First Renewal, if applicable and its period & expiry	02.04.2007
18	Date of Second Renewal, if applicable and its period & expiry	Not applicable
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not applicable
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Dubiyara Iron ore Mine , M/s Nirmala Minerals, Shri Yash Pathak, Yash Tower , Pathak Ward, P.O. and District - Katni (M.P.) Pin Code – 483501
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	HARSH KAPOOR
22	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	RAJESH KUMAR PANDEY
23	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	RAJESH KUMAR PANDEY
24	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	SHAILENDRA PATEL
25	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	MP under rule 22 of MCR 1960, 15/12/1999 MP under rule 22 of MCR 1960, 26/07/2007 MMP under rule 17(3) of MCR 2016, 11/04/2017 MMP under rule 17(3) of MCR 2016, 20/10/2020
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	SOM under rule 11(4) of MCDR 1988, 24/11/2005 SOM under rule 11(4) of MCDR 1988,

		13/02/2013 RMP under rule 17(2) of MCR 2016, 16/08/2022
27	Mineral(s) granted in lease and approved 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

Exploration

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	No proposal	3 bore Holes drilled	
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Lessee	Lessee	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Nil	Nil	
1e	Balance reserves as on 01.04.2021	As on 01.04.2022- 111- 10906092, 122- 357675, Depleted- 111- 485806 T Balance reserves as on 31.03.2023 111- 10420286 121- 357675		
1f	General remarks of Inspecting officer on geology, exploration etc.	<p>Geology: - The Iron ore deposit is Banded Iron formation (BIF) of Pre Cambrian age. The BIF deposit is very well developed and is siliceous. The common name used is Banded Haematite Quartzite(BHQ). The banded formation is probably formed as chemical precipitates in partially enclosed sedimentary basins of back water type. The ore body form low hillock. The ore is haematite and is often slightly specular in character and also Jaspersy. The whole Lease area is mineralized. Total length of deposit in the lease area = 680m. Width of Iron ore deposit in the lease area = 441 m.</p> <p>Exploration: - Exploration has been carried out in G1 scale of exploration with 21 bore holes with 720 meterage</p>		

Development

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	It was proposed to work Towards south of Quarry 1 from 410 MRL to 386 MRL	Development is being carried out as proposed.	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	No top soil or OB benches proposed. Separate benches of 10 mts were proposed in mineral.	Separate benches in Ore and Soil is found maintained	No top soil encountered during the year. OB in pocket form & proposed to be scrapped before ROM

				excavation.
2c	Stripping ratio or ore to OB ratio	1:0.023 Tonne/CuM	1:0.084Tonne/CuM	
2d	Quantity of topsoil generation in m ³	No proposal	Not applicable	No top soil encountered during the year
2e	Quantity of overburden generation in m ³ /T	2373 T	40883 T	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is being carried out as proposed.		

Exploitation

S.N	Item	Proposals	Actual Work	Remarks
3a	Number of pits proposed for production	Two pits	Two pits	
3b	Quantity of ROM mineral production proposed (2022-23)	4,86,044 MT	481311MT	
3c	Recovery of Salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	Not Applicable	
3e	Grade of mineral reject generation and threshold value declared	Not applicable	Not Applicable	
3f	Quantity of sub-grade mineral generation	No proposal	Not Applicable	
3g	Grade of sub-grade mineral generation	Not applicable	Not Applicable	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanical sizing & Sorting proposed by Portable screening	Mechanised method of mining is adopted	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal to carry out beneficiation study during the year	Nil	
3j	Provision of drilling & blasting in mineral benches	No drilling and blasting is proposed	No drilling & Blasting	Iron ore is friable & soft in nature as blue dust and no blasting required
3k	Provision of mining machineries in mineral benches	Back Hoe- 1.2 cum, Dumper- 20 T, Front End Loader- 1.7 cum, Mobile Screening Water tank- 5000 Ltr	Back Hoe- 1.2 cum, Dumper- 20 T, Front End Loader- 1.7 cum, Mobile Screening Water tank- 5000 Ltr	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 Mtr height is proposed using HEMM	Yes 6 Mtr is suitable for proposed method of mining	Proposed bench height is suitable as per the deposit
3m	Total area covered under excavation /pits	20.62 Ha	17.16 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1 :0.023	1 : 084	
3o	Total area put in use under different heads at the end of year	24.48 Ha	24.00 Ha	

3p	Production of ROM mineral during last five-years period, as Applicable	18-19	399962 MT	148420 MT	
		19-20	413300 MT	185293 MT	
		20-21	455007 MT	5000 MT	
		21-22	600009 MT	527982 MT	
		22-23	486044 MT	481311	
3q	General remarks of inspecting officer on method of mining etc.	Mechanized method of mining is being carried out with HEMM without drilling and blasting.			

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	During the year no dumping proposed	Nil	OB generated being utilized for backfilling purpose towards NW mined out area
4b	Location of topsoil, OB & mineral reject dumps	Dumping not proposed	Existing OB dump laying towards Eastern part of lease area	
4c	Number of Dumps within lease area and outside lease area	Two numbers of OB dumps Located towards NE part of lease area	Two numbers of OB dumps located towards NE part of lease area	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	OB dumps outside ultimate pit limit	Outside UPL	
4e	Number of Active & Alive dumps	2 No.	2 No.	
4f	Number of dead dumps	Not Proposed	Presently scope does not exist	OB being used for backfilling purpose
4g	Number of dumps established	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	No proposal	NA	
4i	Length of Retaining wall or garland drain all along dump	No proposal	NA	
4j	Number of settling ponds	No proposal	NA	
4k	Specific comments of inspecting officer on waste dump management	Backfilling is being carried out after ensuring complete extraction of ore. Overburden generated being utilized for backfilling purpose in mined out area. Existing dumps are outside ultimate pit limit being maintained.		

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	Backfilling was proposed on 7.5m	Backfilling was carried out in 7.5m	

		barrier zone towards NW part of lease area	barrier zone towards NW part of lease area.	
5b	Area under backfilling of mined out area	0.02 Ha	About 2.05 Ha backfilled so for.	
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.	None of the pit area matured for backfilling but some area towards NW part within 7.5m barrier zone Has been as per approved proposals.		

Progressive Mine Closer 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	To be submitted before 1st July of every year	submitted within time limit	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (Ha)	About 2.05 Ha proposed	About 2.05 Ha backfilled so for	
	ii) Afforestation done (ha)	0.5 Ha	0.5 Ha	
	iii) No. of saplings planted during the year	About 200 saplings proposed to be planted NA	1280	
	iv) Cumulative no. of plants	No proposal	About 24042	
	v) Any other specific method of rehabilitation	No proposal	Nil	
	vi) Cost incurred on watch & care during the year	No proposal	About 1 Lakh Rs.	
6c	Compliance on reclamation and rehabilitation by backfilling			
	i) Voids available for backfilling (L*B*D)	2.4 Ha	2.4 Ha	
	ii) Void filled by waste/tailings	Waste	Waste	
	iii) Afforestation on the backfilling	No proposal	Nil	
	iv) Rehabilitation by making water reservoir	No proposal	Nil	
	v) Any other specific means	No proposal	Nil	
6d	Compliance of Rehabilitation of waste land within lease			
	i) Afforestation	No proposal	Nil	
	ii) Area rehabilitation	No proposal	Nil	
	iii) Method of rehabilitation	No proposal	Nil	

6e	Compliance of Environment monitoring (core zone & buffer zone)	Environment monitoring for Air, Water, Noise is to be carried out	Environment monitoring for Air, Water, Noise is being carried out	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Afforestation is being done, yearly report on PMCP is being submitted and Environment monitoring is being carried out. Presently None of the pit area matured for backfilling hence scope of reclamation by backfilling does not exists. However some area towards NW part within 7.5m barrier zone Has been backfilled as per approved proposals.		

Mineral Conservation

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	ROM ore produced is to be dispatched.	ROM ore produced is being dispatched	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized method is to be adopted	Mechanized method of mining is adopted	
7c	Different grade of mineral sort out at mine	45% Fe to below 51% and 51% to below 55% Fe	45% Fe to below 51% and 51% to below 55% Fe	
7d	Any beneficiation process at mines	Dry screening	Dry Screening	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Low grade ore is being blended with high grade ore to make it marketable. Mineral conservation is being done by systematic screening and sizing of ore for upgradation of ore quality by removing gangue material.		

Environment

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	No top soil generated during the year	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Not Proposed	Concurrent use of overburden/waste material for backfilling proposed	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent use of overburden/waste material for backfilling purpose	overburden generated is being used for backfilling	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No such Proposal	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Additional plantation of about 200 sapling is proposed	1280 saplings planted during the year	
8g	Survival rate	No proposal	80%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling arrangements to be done to suppress the	Water sprinkling arrangements is there to suppress the dust generated	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in and around mine area is quite satisfactory as plantation done in mine as well as near mines office.		

Compliance of Rule 45

S.N	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns : Monthly and Annual returns to be submitted in time as per statute	Annual Returns 2022-23: - Submitted on time and Monthly Returns for the Month of July - 2023 :- Submitted on time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: - Shri Rajesh Kumar Pandey Geologist:- Shri Shailendra Patel	Mining Engineer and Geologist employed as reported
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 17.61 Ha Dump – 0.14 ha Road & Infra.: 0.86 Hect, Mineral Storage, Plantation : 4.09 ha Reclaimed and Rehabilitated : 4.30 ha	
9d	Scrutiny of Annual return on afforestation	1280 saplings planted with 80% survival rate	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	ROM –Nil Lump- 45% to below 51% Fe – 404.47 T Fines : 51% to Below 55% Fe - 171473 T	
9g	Scrutiny of Annual return on sale value, Ex.Mine price & production costs	Ex Mine Lump- 45% to below 51% Fe -Rs. 562.18 Fines : 45% to below 51% Fe – Rs. 550.00 51% to Below 55% Fe- Rs 549.50/T. Sale value : Lump- 45% to below 51% Fe- Rs. 575 Fines : 51% to below 55% Fe- Rs 575. CoP- Rs. 283.03/T.	
9i	Scrutiny of Annual return on Fixed assets	FA= Rs. 86609049 /-	

9k	Scrutiny of Annual return on mining Machineries	Type of machinery	Capacity of each type of machinery	No. of machinery
		BACK HOE	1.10 cum	3
		FRONT END LOADER	1.7 cum	1
		DOZER	410.00 HP	1
		DUMPER	20.000 Tonnes	4
		WATER TANKER	12000 Litres	1

Details of Validations observed during current inspection and compliance position of earlier violation pointed out: -

Rule No.	Violation Observed	Compliance Status
Nil	Nil	NA

Date:

Name: Ibrahim Sharief

Designation: Deputy Controller of Mines