

I/40006/2024

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR inspection report
Goa regional office

- (i) Name of the Inspecting Officer and ID No. : (ASO) ABHIMANYU SINGH OGRA
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine Official with Designation : Mr. Pradosh Govind Gaonkar- Mines Manager
 Mr. Vijay Waghmare-Mining Engineer
 Mr. Sandeep Sadashiv Kumbhar-Geologist
- (iv) Date of Inspection : 21.08.2024
- (v) Prev. inspection date : 09.11.2023

PART-I : GENERAL INFORMATION

1.	(a) Mine Name	:	Redi
	(b) IBM Registration Number under rule 45 of MCDR, 1988	:	IBM/6218/2011
	(c) Mine code	:	30MSH28012
	(d) Type of Working (Opencast, Underground)	:	Opencast
	(e) Category (Fully Mechanized, Others or Manual)	:	Cat. A, Fully Mech.
	(f) Captive/ Non captive	:	Non-captive
	(g) Postal Address		
	Village	:	Redi
	Taluk/Mandal	:	Vengurla
	District	:	Sindhudurg
	Pin code	:	416517
	State	:	Maharashtra
	Post office	:	Redi
	Nearest police station	:	Vengurla
	Nearest Railway station	:	Sawantwadi
2	Address for correspondance	:	M/s. Minerals & Metals 34, Ashutosh, Nepeansea Road, Mumbai - 400 036 Ph: 022-22025893

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3	(a)	Total Lease Area (Ha) with breakup of Non-forest and forest land	:	27.4520 Ha., Non-Forest
	(b)	Date of Grant of Mining Lease	:	21.08.1979
	(c)	Date of Execution	:	21.08.1979
	(d)	Date of opening of Mine	:	18.11.2022
	(e)	Date of expiry	:	20.08.2029
4		Mineral(s) granted in lease and proved for mining	:	Iron Ore
5	(a)	Name of the lessee, Address, phone, email and fax number	:	M/s. Minerals & Metals 34, Ashutosh, Nepeansea Road, Mumbai - 400 036 Ph: 022-22025893 Email id - mineralsandmetals21@gmail.com
	(b)	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	:	Mr. Sandeep Shrivastava 301 Spring leaf plot no. 298 12th Road Near Ramakrishna Mission Khar west Mumbai, Khar Delivery Mumbai Maharashtra 400052
	(c)	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	:	Mr. D. P. Pawar, M/s Minerals & Metals P. O. Redi, Taluka Vengurla, District. Sindhudurg (Maharashtra) 416517 Phone No. - 9922049899 Email Id - dppawar100@gmail.com Date of Appointment - 10.08.2020
	(d)	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	:	Mr. Pradosh Govind Gaonkar Mines Manager M/s Minerals & Metals P. O. Redi, Taluka Vengurla, District. Sindhudurg (Maharashtra) 416517 Phone No. - 8007810819 Email Id - pradoshg1432@gmail.com Date of Appointment - 04.03.2020
	(e)	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	:	Mr. Vijay Waghmare M/s Minerals & Metals P. O. Redi, Taluka Vengurla, District. Sindhudurg (Maharashtra) 416517 Phone No. - 9673667957 Email id - vijaywaghmare.2008@rediffmail.com Date of Appointment - 04.03.2020
	(f)	Name of the Geologist, Qualification and total	:	Mr. Sandeep Sadashiv Kumbhar M/s Minerals & Metals

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	experience with Address, phone, email, fax number and date of appointment in mine	P. O. Redi, Taluka Vengurla, District. Sindhudurg (Maharashtra) 416517 Phone No. - 7588869990 Email Id - sandy41181@gmail.com Date of Appointment - 08.06.2023
6	Date of Approval of Mining Plan/Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	: Date of approval of Modified Mining Plan; 11/05/2022. Plan period from 2022-23 to 2023-24. Letter No. RMP/MECH-01 (MAH)/GOA/2020-21 Vol.I

PART - II: OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	08 (480m)	11 no of Boreholes (510m)	
1b	Exploration over lease area for Geological axis 1 or 2.	G1 proposed	Area covered under G1:7.61Ha., Non-mineralized area: 19.8 Ha.	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	By lessee	By lessee, Expenditure incurred: 15.1 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	
1e	Balance reserves as on <u>01.04.2024</u>	-	111-351489 Mt 122-489085 Mt. As per AR 2023-24.	
1f	General remarks of inspecting officer on geology, exploration etc.	of Exploration as proposed in the last Plan on was completed and 7.61Ha Area was under G1.		

Development :

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Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Proposed in Block 3; N1741168 to N1741319 & E358532 to E358733	Development location in Block 3, No change in development location.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches in ore and OB proposed	Separate benches in ore and OB maintained	
2c	Stripping ratio or ore to OB ratio	1: 0.6	1:0.23	
2d	Quantity of topsoil generation in m3	754	176	
2e	Quantity of overburden generation in m3	60000	11500	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Mine development quantity was found to be less than proposal, a violation of rule 11(1) of MCDR,2017 was issued.		

Exploitation :

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit proposed in block 3.	Single pit in block 3.	
3b	Quantity of ROM mineral production proposed	2,00,000 Mt	100098.34 Mt production reported in FY2023-24	
3c	Recovery of salable/usable mineral from ROM production	100% proposed	100% recovery of ROM	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No proposal	Not applicable	

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3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Not Applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
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	No proposal	Nil	
3k	Provision of mining machineries in mineral benches	Excavator and dumper Proposed	Excavator and Dumper combination	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 Mts	Average bench height maintained by 5 to 6m..	
3m	Total area covered under excavation/pits	1.844 Ha. proposed at the end of F.Y. 2023-24.	0.636 Ha. at the end of F.Y. 2023-24.	Actual area utilizations are furnished as per the submitted AR of F.Y 2023-24.
3n	Ore to OB ratio for the pit/mine during the year	1 : 0.60	1 : 0.23	
3o	Total area put in use under different heads at the end of year	Area under mining: 1.8444 Ha. Storage for topsoil: 0.0543 Ha. Waste dump site: 0.3936 Ha. Infra: 0.14 Ha.	Area under mining: 0.6356 Ha. Waste dump site: 0.1331 Ha. Infra & roads: 0.2259 Ha. Others: 0.1267 Ha.	Actual area utilizations are furnished as per the submitted AR of F.Y 2023-24.
3p	Production of mineral during last	ROM 2019-20:100000 2020-21:100000 2021-22:100000	2019-20:Nil 2020-21:Nil 2021-22:Nil	Mining Operation has

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	five-year period, as applicable	2022-23:100000 2023-24:200000	2022-23:50252 2023-24:100098	been commenced from 18.11.2022
		(in Mt)	(in Mt)	
3q	General remarks of inspecting officer on method of mining etc.	Mining Operation has been commenced from 18.11.2022 after obtaining all the statutory permissions. There was a delay in acquiring the land. Hence, the production of iron ore was less during 2022-23 and 2023-24 w.r.t. proposal.		

Solid Waste Management-Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate disposal of topsoil and OB proposed.	Top soil and OB waste are separately stacked	
4b	Location of topsoil, OB & mineral reject dumps	Proposed in Block 3(Southern side).	Top soil and waste dump are located at Block 3,Southern side.	
4c	Number of dumps within lease area and outside lease area	2 nos. of Dumps proposed within the ML area.	1 no. of waste dump is constructed (Dump-1).	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temp. Dumps proposed within UPL limit	Temp. dump within UPL.	
4e	Number of active & alive dumps	2 nos. of active dump proposed	1 nos. of dumps	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Retaining wall, garland drain all along temp	

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			dump constructed.
4i	Length of Retaining wall or garland drain all along dump	Garland drain- 200m Retaining wall- 190m	Garland drain- 230m Retaining wall- 170m
4j	Number of settling ponds	No proposal in FY 2023-24	1no constructed
4k	Specific comments of inspecting officer on waste dump management.	Mining Operation has been commenced from 18.11.2022 after obtaining all the statutory permissions. Initially, two nos. of waste dumps proposed during F.Y. 2022-23 to accommodate 65,000 m3 of waste. However, only 24,000 m3 of waste was generated in F.Y 2022-23 and FY2023-24 which was dumped in a single dump (Dump-1).	

Solid Waste Management-Backfilling :

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
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	Mine pit is not matured for backfilling since mineral persists at the bottom of mine workings.		

Progressive Mine Closure Plan :

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Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2).	Proposed.	Submitted for F.Y. 2023-24 along with AR.	
6b	Area available for rehabilitation (ha)	No proposal	Nil	
6c	Afforestation done (ha)	0.127Ha	0.127 Ha	
6d	No. of saplings planted during the year	675 nos.	675 nos.	
6e	Cumulative no. of plants	Not specified.	Approx. 750	
6f	Any other specific method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch & care during the year	Not specified	Rs. 70000 as stated by the management representatives.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	No proposal	Not applicable	
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	

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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.	submitted
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Yearly PMCP report has been submitted. PMCP compliance & progressive closure operations are found to be carried out as per the approved proposals.	

Mineral Conservation :

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	Grade wise sorting within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	Proposed for all +45% Fe	Dispatch reported for 51% to 55% Fe and 55 to 58% Fe (Lumps & Fines).	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	of Dry Crushing & Screening is being carried out on within the lease area. Domestic sale of Iron ore & at pit head.		

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Environment :

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Separate removal and concurrent use of top soil was carried out.	
8b	Concurrent use or storage of topsoil	Concurrent use proposed.	Concurrent use of top soil for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB.	Separate dump for OB was maintained.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed during conceptual stage.	Not applicable as of now.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation of local Spices	Approx 600 nos of plantation has been observed.	
8g	Survival rate	Not specified	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water tanker arrangement for water sprinkling on mine roads has been made.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines area is good		

Compliance of Rule 45 :

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Sl.No.	Item	COMMENTS	Remarks	
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to July 2024 A.R. Submitted up to 2023-2024	Date of submission of AR was 29.06.2024.	
S.N.	Item	Propasals	Actual work	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Geologist appointed.	Mining Engineer: Mr. Vijay Madhavrao Waghmare Geologist: Mr. Sandeep Sadashiv Kumbhar Mines Manager: Mr. Pradosh Govind Gaonkar	Notice of appointments in respect of Manager, Mining Engineer and Geologist are submitted as per MCDR-2017 provision
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Area under mining: 0.635 Ha., Waste Dump: 0.13 Ha. Road and Infrastructure : 0.22 Ha.	
9d	Scrutiny of Annual return on afforestation	Yes	675 nos. within the ML boundary.	
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 and graded ore closing stock: Nil	Actual was also same at that time.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Yes	Sale values of graded ore LUMPS: 51% to below 55% Fe: Rs. 2369.62 /tonne. 55% to below 58% Fe: Rs. 2822.36/tonne.	Some of the invoices were checked during inspection and sale value given

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FINES 51% to was found
 below 55% Fe: correct.
 Rs. 1171.91/
 tonne. 55% to
 below 58% Fe:
 Rs. 3093.80
 /tonne
 Production
 Cost: Rs.
 1061.7/tonne

9i Scrutiny of Annual return Yes
 on fixed assets

Value of Fixed
 Assets (in .)
 2013797

9k Scrutiny of Annual return Yes
 on mining machineries

Hy. Excavators
 - 2 Dozzer- 2
 Dumper - 8

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
MCDR 17 Rule 11(1)	03.09.2024				

(Abhimanyu Singh Ogra)

Indian Bureau of Mines