

I/30480/2024

Review and updation of Mining Plan REPORT

Goa regional office

Mine file No : MAH/SDG/FE-21/GOA

Mine code : 30MSH28012

- (i) Name of the Inspecting : K07) KRISHNENDU CHATTERJEE
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : S/shri P.G.Gaonkar-Mines Manager,Riyazahmed Barudwale
Official with
Designation
- (iv) Date of Inspection : 09-NOV-23
- (v) Prev.inspection date : 09-MAR-20

PART-I : GENERAL INFORMATION

1. (a) Mine Name : REDI
- (b) Registration NO. : IBM/6218/2011
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : MAHARASHTRA
District : SINDHUDURG
Village : REDI
Taluka : VENGURIA
Post office : REDI
Pin Code : 416517
FAX No. : 02223645046
E-mail : nimco.redi@yahoo.com
Phone : 02223636207; 9423055375
- (f) Police Station :
- (g) First opening date : 18-AUG-80
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE - REDI,
correspondance : TALUKA - VENGURLA,
DISTRICT - SINDHUDURG.
3. (a) Lease Number : MSH0054
- (b) Lease area : 27.45
- (c) Period of lease : 50
- (d) Date of Expiry : 20-AUG-29
4. Mineral worked : IRON ORE Main

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5. Name and Address of the

Lessee : MINERALS AND METALS
 32, ASHUTOSH, NEPEAN SEA
 ROAD, MUMBAI GREATER BOMBAY
 MAHARASHTRA
 Phone:
 FAX :

Owner : SANDEEP SRIVASTAVA
 NIRMAL, 16th Floor NARIMAN
 POINT GREATER BOMBAY
 MAHARASHTRA
 Phone: 022-22025893, 2
 FAX : 022-22854417

Mining Engineer

Name : SHRI. VIJAY MADHAVRAO WAGHMARE, Full Tim
 Qualification : MINING ENGINEER
 Appointment/ : 04-MAR-20
 Termination date

Geologist

Name : MRS. ROSHEL FERNANDES, Full Time
 Qualification : M.Sc. (GEOLOGY)
 Appointment/ : 04-MAR-20
 Termination date

Manager

Name : PRADOSH GOVIND GAONKAR
 Qualification : DIPLOMA IN MINING ENGINEERING
 Appointment/ : 04-MAR-20
 Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	23-APR-10
Plan/Scheme of Mining		MP review under 17(1) MCR 2016	31-MAR-20
		MP review under 17(1) MCR 2016	29-OCT-20
		MP modif under 17(3) MCR 2016	11-MAY-22

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	3 nos. boreholes proposed in F.Y 2022-23 with meterage of 180m.	11 nos. of boreholes drilled with meterage of 618m.	Exploration was found ongoing
1b	Exploration over lease area for geological axis 1 or 2	G1 proposed.	Area covered under G1: 3.16 Ha., G2: 0.57 Ha. G3: 3.89 Ha. Non-mineralized area: 19.42 Ha.	Exploration was found ongoing at G3 areas.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	By lessee	By lessee, Expenditure incurred: 17.82 lakhs.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 proposed.	Part of the ML area was explored under G1.	
1e	Balance reserve as on 01/04/20		0.349 million tonnes of Iron Ore (UNFC Cat. 111 & 122) Average Quality: 54.50% Fe	
1f	General remarks of inspecting officers on geology, exploration etc			3.73 Ha. of the ML area was explored by the lessee under G1& G2 levels by drilling with 29 nos. boreholes (upto F.Y 2022-23). Exploration was found ongoing in F.Y. 2023-24. Mining operation in the ML area has been commenced from 18.11.2022 after obtaining all statutory permissions.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Proposed in Block -3; N 1741100 to N 1741350 and E 358380 to E 358750	Development location in Block 3, No change in development location.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in ore and OB proposed.	Separate benches in ore and OB have been maintained.
2c	Stripping ratio or ore to OB ratio	1: 1.30	1: 0.5
2d	Quantity of topsoil generation in m3	960 m3	150 m3
2e	Quantity of overburden generation in m3	65,000 m3	12,500 m3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Mining operation in the ML area has been commenced from 18.11.2022. Development backlog in F.Y. 2022-23 were found undertaken in F.Y 2023-24.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single Pit proposed in Block-.3	Single Pit in Block-3.	
3b	Quantity of ROM mineral production proposed	100,000 tonnes	50,252 tonnes production reported in F.Y 2022-23	
3c	Recovery of sailable/usable mineral from ROM production	100% proposed	100% recovery of ROM	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	

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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 Mining proposal	Mechanised Mine	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	No proposal	Nil	
3k	Provision of mining machineries in mineral benches	Excavator and Dumper combination proposed.	Excavator and Dumper combination.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m of bench height proposed.	Average bench height maintained by 5 to 6m.	
3m	Total area covered under excavation/pits	1.09 Ha. Proposed at the end of F.Y 2022-23	0.45 Ha.	Actual excavation area furnished as per the submitted Annual Return of F.Y 2022-23.
3n	Ore to OB ratio for the pit/mine during the year.	1: 1.30	1: 0.5	
3o	Total area put in use under different heads at the end of year	Area under mining: 1.09 Ha Dump: 0.94 Ha. Infrastructure s & Road: 0.18 Ha. Green belt and Top Soil storage: 0.054 Ha.	Area under mining: 0.45 Ha Dump: 0.13 Ha. Infrastructures & Road: 0.18 Ha. Green belt and Top Soil storage: 0.13 Ha.	Actual excavation area furnished as per the submitted Annual Return of F.Y 2022-23.

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3p	Production of ROM mineral during the last five year period as applicable	2018-19: 100,000 2019-20: 100,000 2020-21: 100,000 2021-22: 100,000 2022-23: 100,000 (in tonnes)	2018-19: Nil 2019-20: Nil 2020-21: Nil 2021-22: Nil 2022-23: 50,252 (in tonnes)	Mining Operation has been commenced from 18.11.2022
3q	General remarks of inspecting officers on method of mining etc.			Mining Operation has been commenced from 18.11.2022 after obtaining all the statutory permissions. There was delay in acquiring the land. Hence, the production of iron ore is decreased during 2022-23. Development backlog during F.Y. 2022-23 were found ongoing in F.Y 2023-24.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB and top soil proposed.	Separate dumping of OB and top soil were carried out.	
4b	Location of topsoil, OB and 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 of lease area	2 nos. of Dumps proposed within the ML area.	1 no. of waste dump is constructed (Dump-1).	Only 12, 500 m3 of waste generated during F.Y 2022-23.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary dumps proposed within UPL limit	Temporary dumps proposed within UPL limit	
4e	Number of active and alive dumps.	02 nos. proposed	01 no. dump constructed.	
4f	Number of dead dumps.	No proposal	Nil	

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4g	Number of dumps established.	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed.	Retaining wall or garland drain all along dump constructed.	
4i	Length of Retaining wall or garland drain all along dumps	190 m of Retaining wall and 200m of Garland drain are proposed.	170 m of Retaining wall and 230 m of Garland drain were constructed.	
4j	Number of settling ponds	No proposal	02 nos. of settling ponds constructed so far.	
4k	Specific comments of inspecting officer on waste dump management			Mining Operation in this mine 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 12,500 m3 of waste was generated in F.Y 2022-23 which was dumped in a single dump (Dump-1).

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 as the mine pit was not matured for backfilling.	
5b	Area under backfilling of mined out area	No proposal	Nil	

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5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mine pit was not matured for backfilling since mineral persists at the bottom of mine workings.

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).	No proposal	Submitted for F.Y. 2022-23.	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	0.05 Ha.	0.065 Ha.	
6d	No. of saplings planted during the year	100 nos. proposed	120 nos. planted.	
6e	Cumulative no .of plants	Not specified.	120 nos. within the ML area.	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	No proposal	Rs. 50,000/- as reported by the lessee representative.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	

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6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	Nil	
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 rehabilitation (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 and buffer zone)	Proposed.	Environmental monitoring is carried out periodically and parameters are found within stipulated limit	PMCP compliance & progressive closure operations are found to be carried out as per the approved proposals.

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6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting of ROM	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical process proposed	Mechanical process for Crushing & Screening.	
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 and beneficiation issues			Dry Crushing & Screening is being carried out within the lease area. Domestic sale of Iron ore at pit head.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed.	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.	

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8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB waste proposed.	Separate dump for OB waste 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 and additional plantation done (Rule 41)	Proposed.	120 nos. saplings planted in the ML boundary area (near BP-40).	Mining Operation in this mine has been commenced from 18.11.2022.
8g	Survival rate	No proposal.	90%	
8h	Water sprinkling on roads to control airborne dust	Proposed by using water tanker.	water tankers arrangement for water sprinkling on mine roads have been made.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mining area is good.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to March 2024 & A.R. Submitted up to 2022-2023		Annual Return of 2022-23 submitted on 29.06.2023.

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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri Pradosh Govind Gaonkar. Mining Engineer: Shri Vijay Madhavrao Waghmare Geologist: Shri. Amit Ghogale	Manager: Shri Pradosh Govind Gaonkar. Mining Engineer: Shri Vijay Madhavrao Waghmare Geologist: Shri. Sandeep Sadashiv Kumbhar	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.	Area under mining: 0.45 Ha Dump: 0.13 Ha. Infrastructure s & Road: 0.18 Ha. Green belt and Top Soil storage: 0.13 Ha.	Area under mining: 0.45 Ha Dump: 0.13 Ha. Infrastructures & Road: 0.18 Ha. Green belt and Top Soil storage: 0.13 Ha.	No change.
9d	Scrutiny of Annual return on afforestation	120 nos. within ML area.	120 nos. saplings planted in the ML boundary area (near BP-40).	
9e	Scrutiny of Annual return on mineral reject generation (Grade and 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.	

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- 9g Scrutiny of Annual return on sale value, Ex. Mine price and production cost
- Sale values of graded ore LUMPS: 51% to below 55% Fe: Rs. 1533.85 / tonne.
55% to below 58% Fe: Rs. 1598.95/ tonne.
FINES
51% to below 55% Fe: Rs. 944.91/ tonne.
55% to below 58% Fe: Rs. 1451.58 / tonne
Production Cost: Rs. 782/ tonne
- Some of the invoices were checked during inspection and sale value given was found correct.
- 9h Scrutiny of Annual return on fixed assets
- Closing balance of the fixed assets is reposted as Rs. 75,25,290/-
- Details mentioned in the AR.
- 9k Scrutiny of Annual return on mining machineries
- Wheel Loader: 1 no.
Back Hoe: 2 nos.
Dumper: 8 nos.
Dozer: 2 nos.
Water Tanker: 1 no.
Pump: 1 no.
- Actual was also same at that time.
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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

Date :**(KRISHNENDU CHATTERJEE)**

Indian Bureau of Mines