

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
Mod. RMP inspection report
Goa Regional Office

- (i) Name of the Inspecting Officer and ID No. : (K07) KRISHNENDU CHATTERJEE
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine Official with Designation : S/shri P Sreenivasa Rao - Mines Manager & Riyazahmed Barudwale - Geologist
- (iv) Date of Inspection : 09.08.2024
- (v) Prev. inspection date : 05.09.2023

PART-I: GENERAL INFORMATION

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|---|---|---|
| 1 | (a) Mine Name | : Redi Iron Ore Mine Block - I |
| | (b) IBM Registration Number under rule 45 of MCDR, 1988 | : IBM/585/2011 |
| | (c) Mine code | : 30MSH28004 |
| | (d) Type of Working (Opencast, Underground) | : Opencast |
| | (e) Category (Fully Mechanized, Others or Manual) | : Cat. A, Fully Mechanized |
| | (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 correspondence | : Redi Iron Ore Mine of M/s Gogte Minerals
At Post Redi, Taluka Vengurla, Sindhudurg |

- Ph: 9765551228
- 3 (a) Total Lease Area (Ha) with breakup of Non-forest and forest land : Mining Lease: 94.7060 (Non-Forest)
Additional Area:30.1175(non-Forest)
- (b) Date of Grant of Mining Lease : 12.01.2006
- (c) Date of Execution : 01.08.2006
- (d) Date of opening of Mine :
- (e) Date of expiry : 11.01.2056; as per MMDR Amendment Act, 2015
- 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 Gogte Minerals
146, Tilakwadi, Budhawarpeth, Belagavi, Karnataka -590006
Ph: (off) 0831-2407755
Fax: 0831-2426487
Email Id - gogte.minerals@gmail.com
- (b) Name of the Nominated Owner with Address, phone, email, fax number and date of appointment : Mr. Madhav Aravind Gogte
146, Tilakwadi, Belgaum - 590006
Date of Appointment - 04.08.2020
- (c) Name of the Mine Agent with Address, phone, email, fax number and date of appointment : Mr. Pramod Sarode
Redi Iron Ore Mine of M/s Gogte Minerals
At Post Redi, Taluka Vengurla, Sindhudurg
Ph: 9765551228
Email: gogte.minerals@gmail.com
Date of Appointment: 02.05.2024
- (d) Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines : Mr. P Sreenivasa Rao
Redi Iron Ore Mine of M/s Gogte Minerals
at Post Redi, Taluka Vengurla, Dist. Sindhudurg, Maharashtra 416517
Phone: 9823017332
Email: rediminesmanager@yahoo.in
Date of appointment: 21.12.2018
- (e) Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine : Mr. P Sreenivasa Rao
Qualification - AMIE. Mining Experience - 23 yrs
Address - At Post Redi, Taluka Vegurla, Dist. Sindhudurg, Maharashtra 416517
Phone: 9823017332
Email: rediminesmanager@yahoo.in
Date of appointment: 23.05.2024

- (f) Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine : Mr. Riyazahmed Barudwale
Qualification: M.Sc Geology
Experience: 30 yrs
Address: At Post Redi, Taluka - Vengurla,
Dist. Sindhudurg, Maharashtra 416517
Phone: 7798632286
Email: riyazahmedbarudwale@gmail.com
Date of Appointment: 25.02.2019
- 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. : Review of MP
RMP/MECH-05(MAH)/GOA/2020-21
Dated 10/03/2021
Period - 2021-22 to 2025-26

Modification in RMP
RMP/MECH-05(MAH)/GOA/2020-21 Vol I dated 23/03/2022
Period - 2022-23 to 2025-26

Modification in RMP
MCDR-MPC0FE/1/2023-GOA-IBM_RO_GOA dated 07.07.2023
Period - 2023-24 to 2025-26

PART - II: OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration:

Sl.No	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	7 No. of Boreholes (218 m)	
1b	Exploration over lease area for Geological axis 1 or 2.	G1 proposed	Exploration has been completed under G1 stage	G1: 34.58 Ha. Proved as non-mineralized:60.12 Ha.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	In house Expenditure : ₹8.78 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	G1 achieved	

1e Balance reserves as Total
on 01.04.2024 reserve:
4.199
million
tonnes

As on
01.04.2024.

1f General remarks of The exploration is completed under G-1
inspecting officer on stage. 102 nos. boreholes drilled by the
geology, exploration lessee before 2021. Further, 23 boreholes
etc. with cumulative meterage of 1149 m
drilled during 2021 to 2024.

Development:

Sl.No	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Pit working proposed between N 1740560 to 1741292 & E 358095 to 358780. Level: 30 to -78m	N 1740560 to 1741283 & E 358095 to 358732 30 to -74	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Benches in ore & Waste OB proposed.	Benches found as per approved document.	
2c	Stripping ratio or ore to OB ratio	1:2.10	1:2.15	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	379077.50 m3	397202.59 m3	BD: 2 tonnes/m3
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Mine development is found in accordance to approved document.		Mod. RMP

Exploitation:

Sl.No	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit proposed.	Single pit worked.	
3b	Quantity of ROM mineral production proposed	368000 Mt	367952.61 Mt	
3c	Recovery of salable/usable mineral from ROM production	100% proposed	100% recovery	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No proposal	Not applicable	
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	Hydraulic Excavator and dumpers Proposed	Hydraulic Excavator and dumpers	
3l	Whether height of benches in overburden and mineral suitable for method of mining	6 Mts bench height proposed	Benche heights are maintained as per approved	

	proposed in MP/SOM		document.	
3m	Total area covered under excavation/pits	35.15 Ha.	33.97 Ha.	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: 2.1	1: 2.15	
3o	Total area put in use under different heads at the end of year	Area under mining: 35.15 Ha., Waste Dump: 31.77 Ha. Road and Infrastructure: 3.99 Ha. Others: 5.59 Ha.	Area under mining: 33.97 Ha., Waste Dump: 30.125 Ha. Road and Infrastructure: 3.92 Ha. Others: 5.51 Ha.	Actual area utilizations are furnished as per the submitted AR of F.Y 2023-24.
3p	Production of ROM mineral during last five-year period, as applicable	2019-20: 368000 2020-21: 368000 2021-22: 368000 2022-23: 500000 2023-24: 368000 (in Mt Iron ore)	2019-20: 367963 2020-21: 367700 2021-22: 367965 2022-23: 367969 2023-24: 367953 (in Mt Iron ore)	
3q	General remarks of inspecting officer on method of mining etc.	Mechanised mining is being carried out by Opencast method. The benches are being maintained as per approved document. During F.Y. 2023-24, dumping of waste was carried out in dump nos. 1, 3 and 6 as per approved proposal. Further temporary backfilling by waste was carried out as per approved 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 OB waste proposed by surface dumping and by backfilling.	Disposal of waste by surface dumping and by backfilling.	No top soil or mineral reject generated during 2023-24.
4b	Location of topsoil, OB & mineral reject dumps	Surface dumping at dump nos. 1, 3 and 6 and temporary backfilling.	No change in waste disposal locations.	
4c	Number of dumps within lease area and outside lease area	6 nos. of dumps within the ML area.	6 nos. of dumps within the ML area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	3 nos. of active dump proposed during 2023-24.	3 nos. of active dumps	
4f	Number of dead dumps	01 inactive dump	01	
4g	Number of dumps stabilized	01	01	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Retaining wall and garland drains constructed along the periphery of the dumps.	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall- 197m	Retaining wall constructed 200m	Retaining wall constructed as per the proposal.

Total 4473 m length of garland are constructed along the toe of the dumps & mine benches towards Environment protective measures

4j	Number of settling ponds	No proposal in FY 2023-24	8 no constructed so far.
4k	Specific comments of inspecting officer on waste dump management.	As a part of waste dump management, (as on 31.03.2024) total 4473 meters garland drain and 3043 meters of retaining wall constructed by the lessee. 78225 Sq Meters of geotextiles were spread over the existing dumps.	

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	Temporary backfilling proposed.	Temporary backfilling carried out at eastern side of the working pit.	Rehandling of backfilled material proposed during conceptual stage.
5b	Area under backfilling of mined out area	4.32 Ha.	4.20 Ha.	Temporary backfilling
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	Temporary backfilling was carried out at eastern side of the Mine pit during 2023-		

backfilling, reclamation etc	24 as per approved proposal. Mine Pit is not matured for rehabilitation by permanent backfilling since mineral persists at the bottom of working Pit.
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Progressive Mine Closure Plan :

Sl.No	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.	Proposed.	Submitted for F.Y. 2023-24 along with AR.	
6b	Area available for rehabilitation (ha)	No proposal	Nil	
6c	Afforestation done (ha)	1.095 Ha. during 2023-24	1.10 Ha along the dump slopes	Including gap filing plantation
6d	No. of saplings planted during the year	2738 nos.	8850 nos. within the ML area in FY 2023-24.	
6e	Cumulative no. of plants	Not specified.	Apprx. 20,000 nos. saplings planted along the dump slopes	
6f	Any other specific method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch & care during the year	2.05 lakhs	Rs. 4.00 lakhs as stated by the management representatives	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	4.32 Ha.	4.20 Ha.	Temporary backfilling
6i	Compliance on reclamation and	No proposal	Not applicable	

	rehabilitation by backfilling (ii) Void filled by waste/tailings		
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.	Carried out on quarterly basis and parameters are found within the limit.
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Yearly PMCP Area not matured for backfilling as the mineral not undertaken in any part of the mine.	report has been submitted. permanent extraction of the mine.

Mineral Conservation:

Sl.No	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting & sizing.	Grade wise sorting & sizing.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical sorting and sizing.	Mechanical sorting and sizing.	
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	No deviation i.r.o. Mineral conservation was observed during the inspection. Crushing and dry screening of ROM has been carried out for grade wise sorting of ore.		

Environment:

Sl.No	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not Applicable	
8b	Concurrent use or storage of topsoil	No proposal	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB.	Separate dump for OB.	
8d	Use of overburden, waste rock, rejects	Not proposed	Nil	

	and fines dumps for restoring the land to its original use		
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	Cumulative approx. 133,000 saplings have been planted on matured slopes of Surface Dumps as on 31.03.2024.
8g	Survival rate	Not specified	70%
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water Sprinkling on roads with two water tankers of 8K each capacity, Nevis Mist Spray and Sprinklers along the Main transport road
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty around the mining area is good.	

Compliance of Rule 45:

Sl.No	Item	COMMENTS	Remarks
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9a	Status of submission	M.R. Submitted up to	Date of submission

S.N.	Item	Propasals	Actual work	Remarks
	of Monthly and Annual returns	Sep. 2024 A.R. Submitted up to 2023-2024	of AR was 29.06.2024.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Geologist appointed.	Mining Engineer cum Manager: Shri P Sreenivasa Rao. Geologist: shri Riyazahmed Barudwale.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Area under mining: 33.97 Ha., Waste Dump: 30.125 Ha. Road and Infrastructure: 3.92 Ha. Others: 5.51 Ha.	
9d	Scrutiny of Annual return on afforestation	Yes	8850 nos. within the ML.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No Mineral Reject generation	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: 30691.45 Tonnes 55-58% Lumps: 12357.77 Tonnes 58-60% Lumps: 139.74 Tonnes 58-60% Fines: 2142.14 Tonnes	No change.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale values of graded ore LUMPS: 51% to below 55% Fe: Rs. 1877.32 / tonne. 55% to below 58% Fe: Rs. 2575.48/ tonne. FINES 51% to below 55% Fe: Rs. 1737.20/ tonne. 55% to below 58% Fe: Rs. 2390.85 / tonne Production Cost: Rs. 1561.04/ tonne	Some of the invoices were checked during inspection and sale value given was found correct.
9i	Scrutiny of Annual return on fixed assets	Yes	Value of Fixed Assets 43408769/- Rupees
9k	Scrutiny of Annual return on mining machineries	Yes	Hy. Excavators: 5 nos.; Dumpers (35 tonnes): 4 nos.; Tipper (8 m3) - 35 nos.; Pumps: 3 nos.; Wheel Loaders: 4 nos. Water Tanker -2 nos.

Details of violations observed during current inspection and compliance position of violation pointed out					
Rule NO.	<u>Violation observed</u>		Rule NO.	<u>Show couse position</u>	
	Issued on	Compliance on		Issued on	Compliance on
Nil					

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines