

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION**

MCDR inspection REPORT

Goa regional office

Mine file No : MAH/SDG/FE-6/GOA

Mine code : 30MSH28004

- (i) Name of the Inspecting : **NKK**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/SHRI. P.SREENIVASA RAO, MM, D.PEDNEKAR, ME, RIYAZAH
Official with
Designation
- (iv) Date of Inspection : 05-SEP-23
- (v) Prev.inspection date : 23-AUG-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **REDI BLOCK I 94.70.60HECT**
- (b) **Registration NO.** : **IBM/585/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MAHARASHTRA
District : SINDHUDURG
Village : REDI
Taluka : VENGURLA
Post office : REDI
Pin Code : 416517
FAX No. : 0831-2426487
E-mail : gogte.minerals@gmail.com
Phone : 0831-2407756
- (f) Police Station : Redi
- (g) First opening date : 01-JAN-58
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE - REDI,
correspondance : TALUKA - VENGURLA,
DISTRICT - SINDHUDURG
3. (a) Lease Number : MSH0040
- (b) Lease area : 94.71
- (c) Period of lease : 50
- (d) Date of Expiry : 11-JAN-56
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : GOGTE MINERALS
Arvind B. Gogte GOGTE
MINERALS 146, TILAKWADI,
BELGAUM KARNATAKA
Phone:0831-2426487
FAX :0831-2426487

Owner : ARVIND B. GOGTE
GOGTE MINERALS 146,
TILAKWADI, BELGAUM
KARNATAKA
Phone: 0831-2426487
FAX : 0831-2426487

Agent : SHRI. V.NARAYAN PRASAD
REDI IRON ORE MINES,
SINDHUDURG MAHARASHTRA
Phone:
FAX :

Mining Engineer

Name : R. Purushothaman, Full Time
Qualification : B. E. (Mining)
Appointment/ : 14-AUG-12
Termination date

Geologist

Name : Riyazahmed Barudwale, Full Time
Qualification : MSc. Geology
Appointment/ : 25-FEB-19
Termination date

Manager

Name : P Sreenivasha Rao
Qualification : BE-Mining
Appointment/ : 21-DEC-18
Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	27-JUL-07
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	25-FEB-13
	:	MP modif under MCR 1960	19-JAN-16
	:	MP modif under 17(3) MCR 2016	31-MAR-20
	:	MP modif under 17(3) MCR 2016	12-NOV-20
	:	MP review under 17(1) MCR 2016	10-MAR-21
	:	MP modif under 17(3) MCR 2016	23-MAR-22
	:	MP modif under 17(3) MCR 2016	07-JUL-23

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	G1 proposed.	10 No. of Boreholes (515 m)	Area covered under G1: 35.29 Ha. Non mineralized area 58.71 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-	In house Rs. 23.12 lakh	M/s Gogte minerals (In-house)
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	Nil	
1e	Balance reserve as on 01/04/20	-	4.747 million tonnes	(Total Reserves & Resources= 22.272 million tonnes)
1f	General remarks of inspecting officers on geology, exploration etc			ML area has been explored by the lessee under G1 level by drilling with 100 nos. of core boreholes and 8 nos. of non-core boreholes. Most of the mineralized area has been explored under G1 stage.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N 1740530 to 1741252 & E 358090 to E 358851 (200 N to 900 N & 26 E to 803 E) 42 to -66m	N 1740550 to 1741195 & E 358157 to 358733 42 to -62 m	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	YES	YES	No Topsoil bench
2c	Stripping ratio or ore to OB ratio	1:3.92	1:2.81	The approved MMP was for a production of 5 lakh tons of Iron Ore during 2022-23. As there was delay in obtaining EC, the ore production of existing EC of 368000 tonnes was considered and produced. Accordingly, the waste handling reduced. Hence the Ore to waste ratio is decreased.
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3 tonnes)	980560 m3 (1961120 tonnes)	517858.97 m3 (1035718 tonnes)	The approved MMP was for a production of 5 lakh tons of Iron Ore during 2022-23. As there was delay in obtaining EC, the ore production of existing EC of 368000 tonnes was considered and produced. Accordingly, the waste handling reduced.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development lagging in respect of waste for 2022-23 due to EC.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit proposed.	Single pit working	
3b	Quantity of ROM mineral production proposed	500000	367969.15	The approved MMP was for a production of 5 lakh tons of Iron Ore during 2022-23. As there was delay in obtaining EC, the ore production of existing EC of 368000 tonnes was considered and produced.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
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 for drilling and blasting.	No drilling and blasting.
3k	Provision of mining machineries in mineral benches	Proposed with hydraulic excavators and dumpers combinations.	Hydraulic excavators and dumpers combinations.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m bench height proposed.	Average bench height of 6m is maintained.
3m	Total area covered under excavation/pits	35.4148 Ha	33.907 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:3.92	1:2.81
3o	Total area put in use under different heads at the end of year	Excavation= 35.4148 Ha, Waste disposal= 28.6399 Ha Infrastructure & Roads= 4.2701 Ha Others= 6.6343 Ha	Excavation= 33.907 Ha Waste disposal= 30.4043 Ha Infrastructure & Roads= 3.9881 Ha Others= 5.0295 Ha
3p	Production of ROM mineral during the last five year period as applicable	2018-2019= 368000 tonnes 2019-20= 368000 tonnes 2020-21=368000 tonnes 2021-22=368000 tonnes 2022-23=50000 tonnes	2018-2019= 367962.63 tonnes 2019-20= 367699.59 tonnes 2020-21= 367964.73 tonnes 2021-22=367954.91 tonnes 2022-23= 367969.15 tonnes

3q General remarks of inspecting officers on method of mining etc.

Mechanized open cast mining method being followed with Excavator & dumper combination. To avoid local failure and wash-off of pit benches due to rain water during monsoon, Bottom of the mine pit benches are covered with silpaulin. Also, rain water diversion arrangement from the catchment area to pit bottom through pipeline and garland drains has been made.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Dumping of waste proposed.	Separate dumping of waste carried out.	
4b	Location of topsoil, OB and mineral reject dumps	OB dump: Within Lease	OB dump: Within Lease	
4c	Number of dumps within lease area and outside of lease area	Within Lease= 6 Non lease area= 0	Within Lease= 6 Non lease area= 0	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	05 Out side the UPL, One temp dump within UPL	05 Out side the UPL, One temp dump within UPL	
4e	Number of active and alive dumps.	03 active dumps proposed.	03 active dumps found	
4f	Number of dead dumps.	01	01	

4g	Number of dumps established.	No proposal.	01	Plantation done in Dump no. 4
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dumps	944 mts (Retaining Wall) 619 mts (Garland drains)	552 mts 228 mts	Garland drain & retaining wall proposed in the additional area of 30.1175 Ha, granted by the State Govt. Maharashtra could not be achieved as there was delay in obtaining EC. Hence there is a deviation in actual verses proposal.
4j	Number of settling ponds	No proposal	8 Nos.	
4k	Specific comments of inspecting officer on waste dump management			Dumping of waste was carried out as per the approved RMP proposals in RY.

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	

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).	Yes	Submitted for F.Y. 2022-23	
6b	Area available for rehabilitation (ha) .	No proposal	Not Applicable	
6c	afforestation done (ha).	Not Applicable	Not Applicable	
6d	No. of saplings planted during the year	i) 6750 ii) 2.70 Ha iii) Plantation	i) 13410 ii) 2.70 Ha. iii) Plantation	Including gap filling
6e	Cumulative no .of plants	Environment Monitering Proposed.	Monitering Carried by Mineral Engineering Services	
6f	Any other method of rehabilitation	Not proposed.	NA	
6g	Cost incurred on watch and care during the year	No proposal	Rs. 5 Lakhs during 2022-23.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on 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	Plantation	Plantation
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (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 and buffer zone)	Periodic monitoring Proposed.	Environmental monitoring is carried out periodically and parameters are found within stipulated limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance & progressive closure operations are found to be carried out as per the approved proposals. To avoid local failure and wash-off of pit benches during monsoon, rain water diversion arrangement from the catchment area to pit bottom through pipeline and garland drains has been made. Gobian walls are also constructed at pit bottom benches.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting and sizing of ROM proposed within the ML area.	Grade wise sorting and sizing of ROM	Sorting by visual method
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 +35% Fe Ore.	Below 55% Fe to 58-60% Fe (Lumps and Fines).	
7d	Any beneficiation process at mines	Dry Crushing/Screening	Dry Crushing/Screening	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Crushing and dry screening of ROM has been carried out for grade wise sorting of ore.

Environment:

Sl.No.	Item	Propasals	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)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Mine pit is not matured for backfilling.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed during conceptual stage.	Cumulative of 124502 saplings have been planted on matured slopes of Surface Dumps as on 31.06.2023.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed.	Baseline information- 111092 no of saplings have been planted on 31.03.2022. Additional Plantation done during FY 2022-23 is 13410 no of saplings.	Additional plantation done during FY 2023-24 is 8850 no of saplings.
8g	Survival rate	70%	75%	
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	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR submitted up to = July 2023 AR submitted up to =FY 2022-23	M.R.s are submitted regularly in 2022-23 and 2023-24.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer - Mr. Digvijay Pednekar Geologist - Mr. Riyazahmed Barudwale Mines Manager - Mr. P Sreenivasa Rao	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Covered under O/C: 33.907Ha Reclamation/Rehabilitated: 0 Waste disposal: 30.404 Ha Buildings, Roads: 3.988 Ha Others (Mineral Storage, Env. Works, broken-up area): 5.029 Ha.
9d	Scrutiny of Annual return on afforestation	Yes	13410 plants
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	Yes	ROM stock: 30729.41 Tonnes Below 55% Lumps: 785.91 Tonnes 55-58% Lumps: 10995.43 Tonnes 58-60% Lumps: 139.74 Tonnes 55-58% Fines: 568.79Tonnes 58-60% Fines: 2142.14 Tonnes

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	LUMPS Grade% Fe Quantity (Tonnes) Sale Value (Rs.) Ex-mine Price (Rs.) Below 55% 2697.38 6570793.76 2435.99 55-58% 63427.10 164066734.93 2586.69 FINES Grade% Fe Quantity (Tonnes) Sale Value (Rs.) Ex-mine Price (Rs.) 55-58% 301825.62 682277272.10 2260.50 Cost of Production (Rs.) = 1476.35	Found in order.
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets = 50203082 Rupees	

9k	Scrutiny of Annual return on mining machineries	Yes	HP/Cu.Mtr Type of Machine No. of units 450 HP Dozer 1 183 HP Dozer 2 2.450 CuM Backhoe 3 1.600 CuM Backhoe 2 2.800CuM Wheel loader 2 8.000 CuM Tipper 35 35.00 Tonne Dumper 4 30.00 CuM Dumper 6 8000.00 Litres Water Tanker 2 40.000 Others 1 1.700 CuM Wheel loader 2 5000 LMN Pumps (Non- Elect) 1 8333 LMN Pumps (Electrical) 2
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Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines