

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

Mining Plan Modification REPORT

Goa regional office

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

Mine code : 30MSH28004

- (i) Name of the Inspecting : P01) PREM PRAKASH
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/SHRI. NARAYAN PRASAD, AGENT & RIYAZAHMED BARUDWALE,
Official with
Designation
- (iv) Date of Inspection : 09-OCT-20
- (v) Prev.inspection date : 18-MAY-18

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : REDI BLOCK I 94.70.60HECT
- (b) **Registration NO.** :
- (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 : gogtminerals@yahoo.com
- Phone : 0831-2407756
- (f) **Police Station** : Redi
- (g) **First opening date** : 01-JAN-58
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : VILLAGE - REDI,
TALUKA - VENGURLA,
DISTRICT - SINDHUDURG
3. (a) **Lease Number** : MSH0040
- (b) **Lease area** : 94.71
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 01-NOV-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 : D. R. VAZE
 Cidade de Goa, Dona Paula,
 Goa NORTH GOA GOA
 Phone: 0832-2454575, 9850477966
 FAX : 0832-2454575

Mining Engineer

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

Geologist

Name : Victor Fernandes, Full Time
 Qualification : M.Sc. In Geology
 Appointment/ : 01-NOV-13
 Termination date

Manager

Name : Ravindra Nipane
 Qualification : BE Mining First class certificate
 Appointment/ : 07-DEC-13
 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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Backlog of Previous Years -08 BHs	04 Nos. BHs drilled in the year 2019-20	Exploration proposal has been reviewed and updated in MMP dt. 31.03.2020
1b	Exploration over lease area for geological axis 1 or 2	Nil for year 2019-20	04 Nos. BHs drilled in the year 2019-20	29 ha. & 3 ha. for Geological Axis 1 or 2 respectively.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-	In house About Rs. 4 lakh	
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	About 4 (ha)	About 58.5 Ha ML area reported as Non-Mineralized
1e	Balance reserve as on 01/04/20	-	5.542 million tonnes as on 01/12/2019	(Total Reserves & Resources = 22.205 million tonnes) as on 01/12/2019
1f	General remarks of inspecting officers on geology, exploration etc		Exploration is continuing, 02 BHs reported drilled in the year 2020-21. Further, Exploration proposal has been reviewed and updated in recently approved modification of Mining Plan (MMP) dtd. 31.03.2020.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	N140 to N570 & E30 to E360	N 140 to N570 & E40 to E360	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:2.28	1:2.7	Te : Te

2d	Quantity of topsoil generation in m3	Nil	Nil
2e	Quantity of overburden generation in m3	420000 m3 (840000 tonnes)	496456m3 (992913 tonnes)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		OB removal & Stripping ratio is in higher side, which may be considered right in the interest of mineral/mine development.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	
3b	Quantity of ROM mineral production proposed	368000 tonnes.	367699.59 tonnes.	
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.	-	-	
3f	Quantity of sub grade mineral generation.	NIL	NIL	
3g	Grade of sub grade mineral generation	-	-	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	-	-	
3j	Provision of drilling and blasting in mineral benches	Not proposed	NA	
3k	Provision of mining machineries in mineral benches	YES	YES	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	benches of 6 m height and 8 to 11 m width	However, regular pit benches of proposed height and width have not been maintained; and massive pit slope failure observed in northern part of main pit.	Violation issued in this regard.
3m	Total area covered under excavation/pits	30.1530 ha. Proposed at the end of 5 years plan period.	About 31.5 Ha.	Area put to use has been reviewed and updated in MMP approved dt. 31.03.2020
3n	Ore to OB ratio for the pit/mine during the year.	1:2.28	1:2.7	
3o	Total area put in use under different heads at the end of year	Excavation=30.1530 ha, waste disposal=38.2098 ha, Infrastructure & roads=4.254 ha,	Excavation=31.568 ha, waste disposal=29.166 ha, Infrastructure & roads=4.176 ha,	Area put to use has been reviewed and updated in approved MMP dt. 31.03.2020
3p	Production of ROM mineral during the last five year period as applicable	2015-16=3,68,000 tonnes 2016-17=3,68,000 tonnes 2017-18=3,68,000 tonnes 2018-19 = 3,68,000 tonnes 2019-20 = 3,68,000 tonnes	2015-16 =3,67,928.41 tonnes 2016-17 =3,67,530.03 tonnes 2017-18 = 3, 67,845.76 tonnes 2018-19 = 3,67,962.63 tonnes 2019-20 =3,67,699.59 tonnes	Production figure of ROM mineral during last five-year period given as reported in Annual Returns.

3q General remarks of inspecting officers on method of mining etc. Mechanized open cast mining method being followed with Excavator & dumper combination.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Yes	
4b	Location of topsoil, OB and mineral reject dumps	Within lease	Within lease	
4c	Number of dumps within lease area and outside of lease area	Within Lease = 5 Outside Lease = 0	Within Lease = 5 Outside Lease = 0	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No	No	
4e	Number of active and alive dumps.	1(WML)	1(WML)	
4f	Number of dead dumps.	-	2 Nos.	
4g	Number of dumps established.	-	05 nos.	
4h	Whether Retaining wall or garland drain all along dumps are there.	proposed	Protective measures constructed along the periphery of dump at Sy. No.-26 found to be washed-out and impaired	Violation issued in this regard.
4i	Length of Retaining wall or garland drain all along dumps	500 mts.	About 514mts	
4j	Number of settling ponds	Nil	02 Nos.	

4k	Specific comments of inspecting officer on waste dump management	Waste dumping proposed in the northern part of Mining Lease area (S. No.-53) and back-filling proposed in the western part of the main pit in year 2020-21 observed not commenced so far. Further, others deviation/deficiencies found in respect of waste dump management have been pointed out through issuing of violations in this regard.
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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.	NIL	NIL	
5b	Area under backfilling of mined out area	NIL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Back-filling has not been proposed in approved MMP in year 2019-20. Back-filling proposed in year 2020-21 in the western part of the main pit observed not commenced so far. Violation issued in this regard.

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Has to be submitted before 31st July.	Not submitted	Violation being issued for the same.
6b	Area available for rehabilitation (ha) .	Not proposed	NA	
6c	afforestation done (ha).		NA	
6d	No. of saplings planted during the year		NA	
6e	Cumulative no .of plants		NA	
6f	Any other method of rehabilitation		NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings		NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area		NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir		NA	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.		NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	12080 Nos. plantation	12100 Nos. plantation	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	7.55 Ha.	about 8 ha.	Rehabilitation of waste dumps
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Rehabilitation of waste dumps	Rehabilitation of waste dumps carried out by plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular Environment Monitoring Proposed	Regular Environment Monitoring being carried out in periodic basis.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Rehabilitation of waste dumps through Plantation has been carried out.	

Mineral Conservation:

Sl.No.	Item	Propasals	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.	yes	yes	

7d	Any beneficiation process at mines	Dry Screening	Dry Screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Dry Screening being 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)	Not proposed	NA	
8b	Concurrent use or storage of topsoil	Not proposed	NA	
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	Not proposed	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	waste Dump rehabilitation	About 84046 no.s of plantation reported carried out over the Surface Dumps.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	As reported Plantation carried out in year 2019-20 - 12100 Plants; Cumulative -84046 Plants	13400 vetiver grass slips, 231 Glyceridia stems, andropogan seeds etc. reported Planted.
8g	Survival rate	-	About 70%	

8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling on haul roads being carried out by three water tankers and by Navis Mist Spray and Sprinklers along the Main transport road.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Water tankers/sprinklers are deployed for dust suppression. Aesthetic beauty in and around mines is good.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Mining Engineer: Purushothaman R Geologist: Mr. Riyazahmed Barudwale Manager: Mr. P. Sreenivasa Rao	Employed as given	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under O/C: 31.568 Ha Reclamation/Rehabilitated: - 0 Waste disposal: 29.166 Ha Buildings, roads: 4.176 Ha Others (Mineral storage, Env. Works): 7.152	Covered under O/C: 31.568 Ha Reclamation/Rehabilitated: - 0 Waste disposal: 29.166 Ha Buildings, roads: 4.176 Ha Others (Mineral storage, Env. Works): 7.152 Ha.	
9d	Scrutiny of Annual return on afforestation	12100 plants	12100 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	ROM: 28152.180 tonnes Below 55% Lumps: 3483.290 tns 55-58% Lumps:4080.97 tns 58-60% Fines: 9559.940 tns	ROM: 28152.180 tonnes Below 55% Lumps: 3483.290 tns 55-58% Lumps:4080.97 tns 58-60% Fines: 9559.940 tns
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Lumps Grade % Fe Ex-Mine Price 58%-60% 1711.03 60%-62% 2066.69 Cost of Production = 980.13 Rupees Fines Grade % Fe Ex-Mine Price Below 55% 1288.57 58%-60% 1661.60 Cost of Production = 980.13 Rupees	Lumps Grade % Fe Ex-Mine Price 58%-60% 1711.03 60%-62% 2066.69 Fines Grade % Fe Ex-Mine Price Below 55% 1288.57 58%-60% 1661.60 Cost of Production = 980.13 Rupees
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets = 33770553 Rs.	Value of Fixed Assets = 33770553 Rs.

9k	Scrutiny of Annual return on mining machineries	Sr. No. HP/Cu.Mtr Type of machine No. of units 1 410 HP Ripper Dozer 1 2 183 HP Dozer 2 3 2.45 Cu.Mtr Back Hoe 3 4 1.7 Cu.Mtr Back Hoe 2 5 2.6 Cu.Mtr Wheel Loader 2 6 2.0 Cu.Mtr Wheel Loader 1 7 1.8 Cu.Mtr Wheel Loader 1 8 1.7 Cu.Mtr Wheel Loader 3 9 10 Tonner Tipper 80 10 35 Tonner Dumper 4 11 30 Tonner Dumper 6	Sr. No. HP/Cu.Mtr Type of machine No. of units 1 410 HP Ripper Dozer 1 2 183 HP Dozer 2 3 2.45 Cu.Mtr Back Hoe Ripper Dozer 1 3 4 1.7 Cu.Mtr Back Hoe 2 5 2.6 Cu.Mtr Wheel Loader 2 6 2.0 Cu.Mtr Wheel Loader 1 7 1.8 Cu.Mtr Wheel Loader 1 8 1.7 Cu.Mtr Wheel Loader 3 9 10 Tonner Tipper 80 10 35 Tonner Dumper 4 11 30 Tonner Dumper 6
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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
MCDR17	Rule 11(1)	09-NOV-20			
MCDR17	Rule 26(2)	09-NOV-20			
MCDR17	Rule 35(2)	09-NOV-20			

Date :

(PREM PRAKASH)

Indian Bureau of Mines