

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

MCDR inspection REPORT

Goa regional office

Mine file No : MAH/SDG/FE-1/GOA

Mine code : 30MSH28017

- (i) Name of the Inspecting : **K04**) **DR. Y.G.KALE**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : **SHRI. V. NARAYAN PRASAD, AGENT**
Official with
Designation
- (iv) Date of Inspection : 13-MAR-19
- (v) Prev.inspection date : 15-SEP-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TIRODA (34-48-12 HECTRS**
- (b) **Registration NO.** : **IBM/585/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : MAHARASHTRA
- District : SINDHUDURG
- Village : TIRODA
- Taluka : SAWANTWADI
- Post office : TIRODA
- Pin Code : 590006
- FAX No. : 0831-2426487
- E-mail : gogte.minerals@yahoo.com
- Phone : 0831-2407756
- (f) Police Station : Aronda
- (g) First opening date : 02-OCT-80
- (h) Weekly day of rest : FRI
2. Address for : VILLAGE - TIRODA,
correspondance : TALUKA - SAWANTWADI,
DISTRICT - SINDHUDURG.
3. (a) Lease Number : MSH0052
- (b) Lease area : 34.48
- (c) Period of lease : 50
- (d) Date of Expiry : 18-JUN-22
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 : Mr.V.Narayan Prasad
 Tiroda Iron Ore Mine,
 Tiroda(Post) Tq-
 Sawanthwadi, Sindhudurg(D)
 Maharashtra-416518
 SINDHUDURG MAHARASHTRA
 Phone: 9850356678
 FAX :

Mining Engineer

Name : Nilesh D Raut, Full Time
 Qualification : BE Mining
 Appointment/ : 01-NOV-14
 Termination date

Manager

Name : S.P.LINGAYAT
 Qualification : DIPLOMA IN MINING, FCMM
 Appointment/ : 01-FEB-13 20-APR-18
 Termination date

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 20-NOV-07
 Plan/Scheme of Mining Renewal under rule 24 MCR1960 12-APR-11
 Mining Scheme rule 12 MCDR1988 18-MAY-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration was proposed in the year 2017-18.	Nil	Lessee has drilled 08 boreholes in the year 2016-17
1b	Exploration over lease area for geological axis 1 or 2	No proposal in the year 2017-18	About 6.848Ha has been explored under G-1 level in the year 2016-17.	So far about 26.5Ha is explored under G-1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No exploration was proposed in the year 2017-18.	In the year 2016-17 8.00 boreholes were drilled by lessee himself and expenditure incurred is around Rs.-7.2 lakhs.	So far total 39 boreholes were drilled and expenditure incurred is about Rs37.20 lakhs.
1d	Balance area to be explored to bring Geological axis in 1 or 2		8.00 Ha	
1e	Balance reserve as on 01/04/20		Reserves as on- 01.04.2018 Proved Mineral Reserves (111) 200850 tonnes Probable Mineral Reserves (122) 592800 tonnes Pre-feasibility m Resources (221+222) 667530 tonnes Inferred M Resources (333) 320100 tonnes Total 1781280 tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			So far lessee has drilled 39 bores covering about 26.5Ha under G-1 level. In the remaining area no promising mining potential is available because of limited width of the lease area.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	-N60 to -N300 and -E760 to -E980.	No work has been carried out in the year 2017-18.	The mine is not working due to operations becoming un-economic. Lessee has submitted Notice of temporary discontinuance of mine on 19.11.2018.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate OB and Ore benches were proposed.	No working has been carried out in the year 2017-18.	Earlier separate benches were made in the OB and Ore.
2c	Stripping ratio or ore to OB ratio	1:1.84 in the year 2017-18	Nil	Mine is not working.
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	122900 in the year 2017-18	Mine is not working and no OB was removed in the year 2017-18.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mine is reportedly not working because of un-economic working and low grade. Future there is no space available to dump overburden in the lease area.

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	No work has been carried out in the year 2017-18.
3b	Quantity of ROM mineral production proposed	200000 tonnes	Nil	No work has been carried out in the year 2017-18 due to operations becoming un-economic.

3c	Recovery of sailable/usable mineral from ROM production	100	Nil	No work has been carried out in the year 2017-18 due to operations becoming un-economic.
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	Mechanised.	Nil	No work has been carried out in the year 2017-18 due to operations becoming un-economic.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	
3j	Provision of drilling and blasting in mineral benches	Nil	Nil	The formation is medium hard in nature and only Ripper dozar was proposed for removal of hard strata. However no work has been carried out in the year 2017-18 due to operations becoming un-economic.
3k	Provision of mining machineries in mineral benches	Heavy duty mining machineries were proposed for excavation and loading.	Nil	No work has been carried out in the year 2017-18 due to operations becoming un-economic.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6.00mtr bench height was proposed.	Benches are maintained as per the proposal.	
3m	Total area covered under excavation/pits	2.82 ha in the year 2017-18	Nil	Total area covered under pit is 5.386 Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.84	Nil	
3o	Total area put in use under different heads at the end of year		Area undr mining- 5.386ha, Waste disposal- 8.377ha, Infrastructure- 0.425Ha, Others (Environmental work)- 0.984Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2013-14 289000 tonnes 2014-15 399000 tonnes 2015-16 200600 tonnes 2016-17 200000 tonnes 2017-18 200000 tonnes	2013-14 126469 tonnes 2014-15 231421 tonnes 2015-16 140708 tonnes 2016-17 47842 tonnes 2017-18 Nil.	
3q	General remarks of inspecting officers on method of mining etc.		The mine is not working from 2017-18 due to mining operations becoming un-economical. The lease are comprised of two blocks viz. Western block of 20.00Ha and Eastern block of 14.4812Ha. However, the ore body is very narrow in Eastern block and also there is no sufficient width available to develop it and mine. In Western block, the MoEFCC while granting EC has put condition to restrict Western block upto 100m from Nanas river, Therefore, about 0.285MT of reserves has been blocked.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No external dump was proposed in the year 2017-18.	The mine was not working and no dumps were generated in the year 2017-18.	Two waste dumps are exist in the western part of the lease area.
4b	Location of topsoil, OB and mineral reject dumps	No external dump was proposed.	In the year 2017-18 no topsoil and mineral reject was proposed and produced and waste generated in the year 2017-18 was proposed for backfilling of the worked out pit. However the mine was not working in the year 2017-18 and no backfilling was done as per the proposal.	Two old waste dumps are exist in the western part of the lease area.
4c	Number of dumps within lease area and outside of lease area	One within the lease	No dump was generated in the year 2017-18.	Two old dumps are exist in the western part of the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	
4e	Number of active and alive dumps.	One	Nil	Two old dumps are exist in the western part of the lease area.
4f	Number of dead dumps.		Two old dumps are exist in the western part of the lease area.	
4g	Number of dumps established.		Two old dumps are exist in the western part of the lese area and plantation is made on the same.	
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	100mtr	about 100 mtr	
4j	Number of settling ponds	Nil	Nil	

4k	Specific comments of inspecting officer on waste dump management	The mine was not working in the year 2017-18 and no external dumping was made. However two old dumps are exist in the western part of the lease area and both the dumps are inactive and plantation is made over the same. retaining wall is made around the existing dump.
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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.	Backfilling was proposed in the year 2017-18.	The mine was not working and no backfilling was made.	Violation to this effect has been pointed out.
5b	Area under backfilling of mined out area	1.9Ha	Nil	Mine was not working in the year 2017-18 and no backfilling was made.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	No topsoil generation was proposed in the year 2017-18.
5d	Total area fully reclaimed and rehabilitated	1.9Ha	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		There was a proposal to back fill about 1.9ha mined out area in the year 2017-18. However the mine is not working from 2017-18 onwards due to operations becoming un-economic and no back filling was made as per the proposal. Violation to this effect has been pointed out.	

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Before 1st july of every year.	Lessee has submitted the yearly report on PMCP for the year 2017-18 on 29.06.2018.	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	1.5Ha	1.697Ha	
6d	No. of saplings planted during the year	2400	Total 19000 saplings were planted, 7975 within the lease and 11025 outside the lease area.	
6e	Cumulative no .of plants		61,180 saplings were planted so far.	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	Rs-77500	Rs-267200	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	200m x 95m x 18m	The mine was not working and no back filling was done.	Violation to this effect has been pointed out.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	About 344120 tonnes of waste was proposed for back filling in the year 2017-18.	The mine was not working and no backfilling was done.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Nil	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	

6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)		The monitoring is carried out as per the schedule through approved third party and reports are maintained.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The backfilling over an area of 1.9Ha was proposed during 2017-18 by dumping of 344120 T of material. However the mine is not working since 2017-18. Violation to this effect has been pointed out vide violation letter dated 15.03.2019.

Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting was proposed within the lease.	No work has been carried out in the year 2017-18.	Earlier lessee was doing grade wise sorting within the 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.		Mine is not working in the year 2017-18. However lessee is sorting two types of ores, below 55% fe grade ore and 55 to 585fe grade ore.
7d	Any beneficiation process at mines .	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	No topsoil was removed in the year 2017-18.	
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No external dump was proposed in the year 2017-18.	Mine was not working and no dumping was made in the year 2017-18.	the OB removed earlier was dumped separately in the enmarked area.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB generated in the year 2017-18 was proposed for back filling.	The mine was not working and no back filling was done.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	About 1.9Ha was proposed for backfilling in the year 2017-18.	The mine was not working in the year 2017-18 and no back filling was done.	Violation has been pointed out.

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	About 61,180 saplings were planted in and outside the lease area.
8g	Survival rate	85 to 90%
8h	Water sprinkling on roads to control airborne dust	The mine is not working and no air borne dust is generating at present. When ever necessary lessee is using Water tanker mounted trucks for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	It has been proposed to convert the mined out pit as water reservoir partly by backfilling. The averall aesthetic beauty is appears good.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Lessee is regularly submitting Monthly and Annual returns.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	In the Annual returns submitted for the year 2017-18, Manager is shown as Mr. Subhash P Lingayat, Mining Enginner-Mr. Nilesh Raut and Geologist-Mr.Sunil T.Injal	As per the office record Mines Manager and Geologist were teminated on 20.04.2018. Details of Mining engineer is found correct.	The mine was not working since 2017-18 and the Geological work is being looked after from company's Head quarters.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining- 5.386Ha, Area under waste dump-8.377Ha, Infrastructure -0.425Ha and Other-0.984Ha.	Details of land use pattern mentioned in the annual returns are almost matching.	
9d	Scrutiny of Annual return on afforestation	7975 within the lease and 11025 ouside the lease.		

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	About 4143.450 tonnes of ROM was shown as closing stock and about 1382.540 tonnes of lumps having below 55 fe grade are was shon as closing stock	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value of below 55 grade fines is shown as Rs- 951.82/tonne and for below 55 grade fe Lumpy ore Rs- 1070.3/tonnee, Ex.mine price was shown as same as the sale value.	The Exmine price was shown same as the sale value. This was brought to the notice of Agent.
9h	Scrutiny of Annual return on fixed assets	Value of Fixed asset is shown as zero.	
9k	Scrutiny of Annual return on mining machineries	02 excavatore were shown in the annual returns.	The mine is not working and no machineries were observed during field visit.

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)	15-MAR-19			

Date :

(DR. Y.G.KALE)

Indian Bureau of Mines