

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

**Mining Plan Modification REPORT**

**Goa regional office**

**Mine file No :** GOA/Fe/170

**Mine code :** 30GOA02022

- (i) Name of the Inspecting : **K03** ) **G. S. KANNAN**  
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : S/Shri. Saroj Kumar, patankar, Vikas - QP  
Official with  
Designation
- (iv) Date of Inspection : 04/10/2017
- (v) Prev.inspection date : 19/08/2016

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GAUTONA DUSRIFALL**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : GOA  
District : SOUTH GOA  
Village : CODLI  
Taluka : SANGUEM  
Post office : KIRLAPALE-PABAL  
Pin Code : 403727  
FAX No. :  
E-mail :  
Phone :
- (f) Police Station : SANGUEM
- (g) First opening date : 24/02/1958
- (h) Weekly day of rest : SUN
2. Address for : Village-Codli,  
correspondance Taluka-Sanguem,  
District-South Goa, Goa
3. (a) Lease Number : GOA0014
- (b) Lease area : 96.28
- (c) Period of lease :
- (d) Date of Expiry : 22/11/2027
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : Sociedade Timblo Irmoaos Limitada  
 Post Box No. 34, Kadar  
 Manzil, Margao SOUTH GOA  
 GOA  
 Phone:(0832) 721185  
 FAX : (0832) 731304

Owner : RADHA SATISH TIMBLO  
 TIMBLO PVT LTD KADAR MANZIL  
 MARGAO SOUTH GOA GOA  
 Phone: (832)714163/64/  
 FAX : 91-832-731304

Agent : G.V. KANEKAR  
 Kadar Manzil, P.O. Box No.  
 34, Margao, Goa. SOUTH GOA  
 GOA  
 Phone: 0832-714163  
 FAX : 0832 - 731304

## Geologist

Name : VENKATESH KANEKAR, Full Time  
 Qualification : M.SC. GEOLOGY  
 Appointment/ : 12/10/2003  
 Termination date

## Manager

Name : MINGUEL FERNANDES  
 Qualification : First Class Mine Manager's Cert. of Comp  
 Appointment/ : 09/11/2000 31/05/2002  
 Termination date

## Manager

Name : HANIF SALASKAR  
 Qualification : DIP MINING, FCMM  
 Appointment/ : 01/07/2008  
 Termination date

## Manager

Name : JYOTINDRA KHEDEKAR  
 Qualification : Second Class Mine Manager's Cert. of Cor  
 Appointment/ : 01/06/2002 01/07/2008  
 Termination date

## Manager

Name : Newton Fernandes  
 Qualification : Diploma in mining & Survey, F.C.C.  
 Appointment/ : 25/08/2000 08/11/2000  
 Termination date

## Manager

Name : T. PRASANNA KUMAR  
 Qualification : Dip. in Mining & Mine Surveying, AMIE &  
 Appointment/ : 01/07/1994 25/08/2000  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	28/10/2002
		Modif.approved Mining Scheme	03/11/2005
		Renewal under rule 24 MCR1960	15/05/2007
		MP modif under 17(3) MCR 2016	28/09/2016

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There is no Proposal in approved Plan for the year 2016-2017	112 Boreholes has been drilled with 10315 meterage. 4 Boreholes are proposed during 2017-2018	Mine is not Working from 2012 because want of Statuary Clearances
1b	Exploration over lease area for geological axis 1 or 2	Additional exploration are not proposed in modified mining plan for the year 2016-2017	Additional exploration is not carried out after re-commencement of mining operations in September 2015. Area explored under G-1 category is 26 Hect. Total 112 boreholes were drilled till date.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Own drilling and/ or Contract drilling machines were used for Exploration in the past.	Total 112 boreholes were drilled. Total Rs. 328 lac was spent on exploration.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was carried out at 50m X 50m grid interval. Additional exploration was proposed in 50m X 50m	Exploration was carried out at 50m X 50m grid interval. Balance area of 1.80 hect area has to be explored for availability of ore from G-2 to G-1.	
1e	Balance reserve as on 01/04/20	As on 01.04.2017 Proved Mineral Reserves (111) = 2903468 Tons Probable Mineral Reserves (122) = 131000 Tons Feasibility Mineral resources (211) = 3254000 Tons	As on 01.04.2017 Proved Mineral Reserves (111) = 3219000 Tons Probable Mineral Reserves (122) = 131000 Tons Feasibility Mineral resources (211) = 3254000 Tons	Hence there is no mining activity; R & R has not been changed.

1f	General remarks of inspecting officers on geology, exploration etc	The deposit is part of South Goa - Codli Deposit	The general Structure of Ore body is folded along both longitudinal & lateral directions.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In between section X-XVIA from 28RL to 00 RL	Nil	Mine is not Working because want of Statuary Clearances
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	5 Bench's Proposal in OB & in Ore	Nil	
2c	Stripping ratio or ore to OB ratio	1 : 6.67	Nil	
2d	Quantity of topsoil generation in m3	No Proposal	Nil	
2e	Quantity of overburden generation in m3	947860 m3	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Nil	Nil	

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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Development and production was proposed inbetween Section- X to XVIA	Nil	Development & Production are not carried out because want of Statuary Clearances

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3b	Quantity of ROM mineral production proposed	The total target of ROM Production was 315532 tons during 2016-2017 as per distribution from lessee on capping on EC limit.	Nil	
3c	Recovery of sailable/usable mineral from ROM production	100%	Nil	
3d	Quantity of mineral reject generation	2902 tons with 54 to 45% FE 92671 tons with 45 to 35% FE	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	2902 tons with 54 to 45% FE 92671 tons with 45 to 35% FE	Nil	
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	Dry Mobile screening was proposed for grade-wise production.	Because of Non-Working, Mobile screening is not in use.	
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	Drilling and blasting was not proposed.	Nil	Drilling and blasting is not carried out and ripper dozer is Proposed for excavation.

3k	Provision of mining machineries in mineral benches	Excavator- 2 No Ripper Dozer - 1 No Dozer - 1 No Truck - 20 No W/ Loader - 3 No Water tanker - 1 No Water Pump - 1 No Portable generator - 3 No	Nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 6m was proposed in waste and Ore.	As per the Proposal all bench height is maintained.	Because of Non-Working for last five years few benches are eroded/ collapsed with each other's due to monsoon.
3m	Total area covered under excavation/pits	23.47 hect	23.47 hect	Due to Non-working of Mines, additional area is not in use.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 6.67	Nil	
3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2017. Mines = 23.47 hect Dump = 4.37 hect Others = 12.324 hect Mine road = 0.099 hect	Land use Pattern as on 01.04.2017. Mines = 23.47 hect Dump = 4.37 hect Others = 12.324 hect Mine road = 0.099 hect	There are no Changes in land use Pattern because of Non-Working.
3p	Production of ROM mineral during the last five year period as applicable	2016-2017 = 315532 Tons 2015-2016 = Nil 2014-2015 = Nil 2013-2014 = Nil 2012-2013 = Nil	2016-2017 = Nil 2015-2016 = Nil 2014-2015 = Nil 2013-2014 = Nil 2012-2013 = Nil	From the Period 2012 to till date, the Mine was not working due to want of statutory order

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

### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no Topsoil and Mineral rejects, only OB is proposed as temporary backfilling & Surface dumping.	There is no backfilling & Dumping as per proposal.	
4b	Location of topsoil, OB and mineral reject dumps	Surface Dumping:- In between section XVA to XVIII Temporary Backfilling:- In between section IXA to XIVB	Nil	
4c	Number of dumps within lease area and outside of lease area	Lease area = 1 Dump Non Lease area = Nil	Lease area = 1 Dump Non Lease area = Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Northern Side of the Lease area outside UPL	Northern Side of the Lease area outside UPL	
4e	Number of active and alive dumps.	Active Dump = One	Active Dump = One	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	



4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain, Geotextile, Rockwall was proposed to maintain & cleaned on different terraces of Backfilled area to avoid wash-off.	Trench, Settling Pond is maintenances and cleaning.	Mine was not working due to want of statutory order
4i	Length of Retaining wall or garland drain all along dumps	Garland Drainage = 309m X 1m X 0.5m Geo Textile = 0.789 hect	Nil	
4j	Number of settling ponds	Settling Pond is maintenances and cleaning.	Settling Pond is maintenances and cleaning.	
4k	Specific comments of inspecting officer on waste dump management	Nil	Nil	

#### 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.	Due to non-availability of area, it is proposed for temporary backfilling within Pit.	Nil	Mine is not Working because want of Statuary Clearances
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.	Nil	Nil

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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).	It should be on or before 1st July every year.	Submitted	
6b	Area available for rehabilitation (ha) .	3.5 hect	Nil	
6c	afforestation done (ha).	2.00 hect	Nil	
6d	No. of saplings planted during the year	500 saplings	Nil	
6e	Cumulative no .of plants	91000 saplings proposed Outside ML	58082 saplings planted outside ML	
6f	Any other method of rehabilitation	No Proposal	Nil	
6g	Cost incurred on watch and care during the year	Rs.50000/-	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Pit-1:- 304m X 168m X37m Pit-2:- 145m X 192m X25m Pit-3:- 200m X 113m X 10m	Nil	

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6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Pit-1:- 1889664 m3 Pit-2:- 696000 m3 Pit-3:- 226000 m3	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)	Quarterly environment monitoring is required	Quarterly environment monitoring is carried out through own as well as private agency in Core & Buffer Zone as per guidelines.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	Nil

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	As per approved mining plan proposed ROM was classified as High Grade ore +54% Fe and below 54% Fe is considered as Mineral reject due to low market price.	Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical processing i.e. dry screening was proposed for grade-wise production.	Nil	
7c	Different grade of mineral sorted out at mines.	The grade-wise production of High Grade ore +54% Fe was proposed in modified mining plan.	Nil	

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7d	Any beneficiation process at mines .	Mechanical processing i.e. dry screening was proposed for grade-wise production.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil	Nil

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	
8b	Concurrent use or storage of topsoil	No Proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal was to dump the waste in existing dump	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	
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)	Existence of plantation is there on slopes of the dump, along the road and other part of lease area.	Existence of plantation is there on slopes of the dump, along the road and other part of lease area.	
8g	Survival rate	No Proposal	60%	
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Water sprinkling on road is observed	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	Surrounding area beyond lease area is greenery and lessee has carried out plantation on dump, along road etc.	Cumulatively 58082 plants has planted outside the lease area

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#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = August 2017 AR Submitted up to = 2016-2017	Both Annual & Monthly returns are submitting in online system.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Dip.M.E has beenappointed	Proposal for Appointing Mining Engineer, Geologist.	Mine is not Working because want of Statuary Clearances
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Same as per mining plan	Land use pattern as per approved modified mining plan and AR are coinciding	Due to No Production & development, there is no changes in landuse pattern
9d	Scrutiny of Annual return on afforestation	Nil	Mine is not Working because want of Statuary Clearances	

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Mine is not Working because want of Statuary Clearances
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Mine is not Working because want of Statuary Clearances
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil	Mine is not Working because want of Statuary Clearances
9h	Scrutiny of Annual return on fixed assets	Fixed assets are filled	Mine is not Working because want of Statuary Clearances
9k	Scrutiny of Annual return on mining machineries	Nil	Mine is not Working because want of Statuary Clearances

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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 :****(G. S. KANNAN)**

Indian Bureau of Mines