

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

**MCDR inspection REPORT**

**Goa regional office**

**Mine file No :** GOA/Fe/60

**Mine code :** 30GOA02032

- (i) Name of the Inspecting : **K03** ) **G. S. KANNAN**  
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri.Pradeep, MM  
Official with  
Designation
- (iv) Date of Inspection : 13/09/2017
- (v) Prev.inspection date : 16/05/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **HULDOOL DONGER BIMBOL**
- (b) **Registration NO.** : **IBM/649/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : GOA  
District : SOUTH GOA  
Village : SHIGAO  
Taluka : DHARBANDORA  
Post office : COLLEM  
Pin Code : 403410  
FAX No. : 0832-730372  
E-mail :  
Phone : 0832-704131-33
- (f) Police Station :
- (g) First opening date : 19/03/1941
- (h) Weekly day of rest : SUN
2. Address for : Vill.: Sigao & Collem, Tq.: Sanguem,  
correspondance P.O. COLLEM-403410,  
Dist. S.Goa, Goa.
3. (a) Lease Number : GOA0074
- (b) Lease area : 100
- (c) Period of lease : 10
- (d) Date of Expiry : 21/11/1997
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : EYESTAR FINANCE LEASING LIMITED  
 PANJIM NORTH GOA GOA  
 Phone:  
 FAX :

Owner : EYESTAR FINANCE AND LEASING PVT.LTD.  
 F1,FIRST FLOOR,OCEANIC  
 APARTMENTS BEHIND HANUMAN  
 TEMPLE,MIRAMAR PANAJI,GOA  
 NORTH GOA GOA  
 Phone:  
 FAX :

Agent : ANURAG MISHRA  
 VILLA FLORES DA  
 SILVA,ERASMO CARVAL  
 STREET,POST BOX NO-31  
 MARGAO,GOA SOUTH GOA GOA  
 Phone:  
 FAX :

## Mining Engineer

Name : SURAJ GUPTA,Full Time  
 Qualification : B.E.(Mining), FCMMC  
 Appointment/ : 23/11/1999  
 Termination date

## Mining Engineer

Name : PUNIT KUMAR SRIVASTAVA,Full Time  
 Qualification : Degree in Mining & II Class MM Cert.  
 Appointment/ : 21/09/2009  
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	01/08/2001
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	17/11/2003
		Renewal under rule 24 MCR1960	14/09/2007
		Modif.of approved Mining Plan	24/04/2012
		MP modif under MCR 1960	07/08/2015
		MP modif under 17(3) MCR 2016	05/10/2016
		MP modif under 17(3) MCR 2016	09/02/2017

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There is 110 boreholes Proposal in Previous approved Plan	83 Boreholes has been drilled during 2010-2013	
1b	Exploration over lease area for geological axis 1 or 2	Additional 4 boreholes was proposed in modified mining plan.	3 BH has completed and stoped the exploration because of GSPCB Constent issue.	
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 161 boreholes were drilled with 8801 meterage. Total Rs.23102298 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.	Exploration was carried out at 50m X 50m grid interval. Balance area of 43 hect area has to be explored for availability of ore from G-3 to G-1.	
1e	Balance reserve as on 01/04/20	As on 01.04.2017 Proved Mineral Reserves (111) = 7.8 Million Tons Pre-Feasibility Mineral Resources (221) = 28.8 Million Tons Measured Mineral Resources (331) = 12.2 Million Tons Inferred Mineral Resources (333) = 64.7 Million Tons	As on 01.04.2017 Proved Mineral Reserves (111) = 7.5 Million Tons Pre-Feasibility Mineral Resources (221) = 28.8 Million Tons Measured Mineral Resources (331) = 12.2 Million Tons Inferred Mineral Resources (333) = 64.7 Million Tons	

1f	General remarks of inspecting officers on geology, exploration etc	Ore body is associated with phyllitic clay and limonitic clay with 1.5 to 2.0m band of Manganiferous Clay	These deposit consists of Haematite, Limonite, Goethite, Magnetite and Martite.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1696900 to N1697350/ E414800 to E415200	N1696900 to N1697350/ E414800 to E415200	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil is not present in area. Proposed 4 benches in waste and 3 benches in ore.	Topsoil is not present in area. 4 benches in waste and 3 benches in ore are developed.	
2c	Stripping ratio or ore to OB ratio	1 : 1.36	1 : 1.32	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	463182 m3 1019000 tons	330200 m3 726439 tons	
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 in Single Pit	Development and production is carried out as per in proposed area.	

3b	Quantity of ROM mineral production proposed	600000 tons	549993 tons	
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	
3d	Quantity of mineral reject generation	No Proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	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.	Dry screening was used for grade-wise production.	
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 proposed.	Drilling and blasting was carried out as per proposed.	Drilling and blasting was used for loosening the hard/ laterite benches
3k	Provision of mining machineries in mineral benches	Excavator- 4 No Ripper Dozer - 1 No Dozer - 1 No Truck/ Dumper - 100 No W/ Loader - 4 No Water tanker - 3 No Mobile Screen - 1 No Water Pump - 2 No DG set - 2 No	Excavator- 4 No Ripper Dozer - 1 No Dozer - 1 No Truck/ Dumper - 100 No W/ Loader - 4 No Water tanker - 3 No Mobile Screen - 1 No Water Pump - 2 No DG set - 2 No	

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
3m	Total area covered under excavation/pits	38.30 Ha	38.20 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.36	1 : 1.32
3o	Total area put in use under different heads at the end of year	86.00 hect	85.47 Ha
3p	Production of ROM mineral during the last five year period as applicable	2012-2013 = 600000 tons 2013-2014 = Nil 2014-2015 = Nil 2015-2016 = 270000 tons 2016-2017 = 600000 tons	2012-2013 = 599995 tons 2013-2014 = Nil 2014-2015 = Nil 2015-2016 = 109627 tons 2016-2017 = 549993 tons
3q	General remarks of inspecting officers on method of mining etc.	Nil	Nil

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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 dumping of existing waste dump.	Entire developed quantity of 726439 tons has been dumped in the proposed the area	
4b	Location of topsoil, OB and mineral reject dumps	N 1697400 to N 1697600 E 414850 to E 415400	N 1697400 to N 1697600 E 414850 to E 415400	

4c	Number of dumps within lease area and outside of lease area	Within Lease = 7 Outside Lease = Nil	Within Lease = 7 Outside Lease = Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump-1: North of Lease area Dump-2: SW of the Lease area Dump-3: SE of the Lease area Dump-4: SE of the Lease area Dump-5: SE of the Lease area Dump-6: East of the Lease area Dump-7: NE of the Lease area Dump No.1, 2, 5, 6 & 7 are within the Ultimate pit limit.	Dump-1: North of Lease area Dump-2: SW of the Lease area Dump-3: SE of the Lease area Dump-4: SE of the Lease area Dump-5: SE of the Lease area Dump-6: East of the Lease area Dump-7: NE of the Lease area Dump No.1, 2, 5, 6 & 7 are within the Ultimate pit limit.
4e	Number of active and alive dumps.	Active Dump =1 Alive Dump =6	Active Dump =1 Alive Dump =6
4f	Number of dead dumps.	6 Dump	6 Dumps
4g	Number of dumps established.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain, Settling Pond was proposed on different terraces of dump area to avoid wash-off.	Trench, Settling Pond maintenances and cleaning was done
4i	Length of Retaining wall or garland drain all along dumps	1000m proposed	Garland Drainage = 2000 x 0.5 x 0.5m Laterite Wall = 1000 x 0.5 x 0.5m
4j	Number of settling ponds	1 Nos	1 Nos
4k	Specific comments of inspecting officer on waste dump management	Nil	Nil

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No Proposal for backfilling	No backfilling done
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.	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 submitted on or before 1st July every year.	Submitted	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	Gap filling only	Gap filling only	
6d	No. of saplings planted during the year	1000 saplings	1000 saplings	
6e	Cumulative no .of plants	75000 saplings	109106 Saplings	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	Nil	Nil	



6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil
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)	Quarterly environment monitoring is required	Quarterly environment monitoring is carried out through own as well as private agency.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	Nil

### 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 +55% Fe, +50-55% Fe as Normal Ore and below 45% Fe is considered as waste due to low market price.	The ROM ore was processed in dry screening and thereafter gradewise production and despatch is reported	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical processing i.e. wet & dry screening was proposed for grade-wise production.	Mechanical processing i.e. wet & dry screening was used for grade-wise production.	
7c	Different grade of mineral sorted out at mines.	The grade-wise production of +50% Fe & +45-50% Fe was proposed in modified mining plan.	As per approved mining plan proposed ROM was classified as +50% Fe, +45-50% Fe, below 45% is considered as mineral reject due to low market price.	
7d	Any beneficiation process at mines .	Mechanical processing i.e. dry screening was proposed for grade-wise production.	Wet beneficiation plant of 200TPH capacity having cyclones and classifiers and Dry mobile screening plant of 400 TPH capacity	

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	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	1 Dump is proposed	Total 7 Dump is present, but dump-1 is active	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Dumps are restored with plantation.	
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. Additional plantation is proposed in gap plantation.	1000 plants has planted as gap plantation during the year 2016-2017.	

8g	Survival rate	No proposal.	Survival rate is around 60% for previous plantation
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 during the inspection.
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.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Both Annual & Monthly returns are submitting in online system.	Submitted within the time limit	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Geologist & Surveyor are appointed partly.	It is advised to appoint full time Geologist & Surveyor	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as per A.R. Mines = 38.20 hect Dump = 23.32 hect Office/ Mine road = 7.602 hect Unused = 28.38 hect	Land use pattern as per approved modified mining plan.	
9d	Scrutiny of Annual return on afforestation	1000 plants	Gap plantaion has carried out in dump area	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No Proposal	Nil	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stack =186779 tons Grade +53%	As per proposal the ROM has been carried out
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value for all dispatch and Cost of Production is shown	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed assets has been filled	Fixed asset have filled properly.
9k	Scrutiny of Annual return on mining machineries	Backhoe, wheel loader, dozer, truck & Pump	All machineries are available in site

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**Details of violations observed during current inspection and compliance position of violation pointed out**

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

**Date :**

**(G. S. KANNAN)**

Indian Bureau of Mines