

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	Mr.S. Prasad, DCOM
2	Date of inspection	04/08/2017
3	Name of the Mine	Bicholim Iron Ore Mine, T. C. No. 15/1941 Mandoorbaga Lease
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	99.2909 Ha Forest - Nil
5	Mine code	30GOA01243
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/449/2011
7	Name of the lessee, Address, phone, email and fax number	Sesa Ghor, 20 EDC Complex, Patto, Panaji(Goa) – 403 001
8	Village	Mayem, Mulgao, Sirigao
8	Taluka/Mandal/District	Taluka: Bicholim, District: North Goa
10	State	Goa
11	Post office & PIN	Bicholim,-403 504
12	Nearest police station	Bicholim Police Station
13	Nearest Railway station	Thivim Railway Station
14	Date of Grant of Mining Lease	20/08/1941
15	Date of Execution	16/03/2015
16	Date of opening of Mine	28/08/1956
17	Date of first Renewal, if applicable and its period & expiry	22/11/1987 to 21/11/2007, 20 Years
18	Date of second Renewal, if applicable and its period & expiry	22/11/2007 to 21/11/2027, 20 Years
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr Kishore Kumar, Address: Sesa Ghor, 20, EDC Complex, Patto, Panaji- Goa, 403001, Phone no: +91 7030284466 Fax:+91-832 2460600 Date of appointment: 02/06/2015
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Ulhas Nagvenkar Address: Bicholim Iron Ore Mine, Dhabdhaba, Bicholim-403504 Phone no: +91 9765565526 Date of appointment: 10/08/2016

22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Muthumari.M Address: Bicholim Iron Ore Mine, Dhabdhaba, Bicholim-403504 Phone no: +91 9673221359 Date of appointment: 01/04/2017
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Kallepally Prasad Babu (B.Tech, 8 years) Address: Bicholim Iron Ore Mine, Dhabdhaba, Bicholim-403504 Phone no: +91 9765410970 Date of appointment: 25/05/2017
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Mr. Maheshwar Kinnal (Geologist) Mr. Kallepally Prasad Babu (Mining Engg)
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Letter No. MMP/MECH-42/GOA/2015-16 Vol.I Approval Date:02/02/2017
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Nil
27	Mineral(s) granted in lease and proved for mining	Iron Ore
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Non captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	-
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	-
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	22.7079 ha	Nil	Balance area is under Human Settlements
1e	Balance reserves as on 01.04.2017...	15.463MT		

1f	General remarks of inspecting officer on geology, exploration etc.	Area under human settlement to be explored to achieve G1 or G2. -
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2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	E-383000 /383300 N-1725800 /1726100	E-383000 to 383300 N-1725800/1726100	-
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	Top soil-Nil Mineral-4 Overburden-12	Top Soil-Nil Mineral-4 Overburden-12	-
2c	Stripping ratio or ore to OB ratio	1:4.08	1:3.08	-
2d	Quantity of topsoil generation in m3	Nil	Nil	-
2e	Quantity of overburden generation in m3	780000	567018	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development banches to be maintained widen for better stability of mine faces.		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	-
3b	Quantity of ROM mineral production proposed	421000	404668	-
3c	Recovery of salable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	101000	84155	-
3e	Grade of mineral reject generation and threshold value declared	>45% Fe to <54% Fe	>45% Fe to <54% Fe	-
3f	Quantity of sub-grade mineral generation	-	-	-
3g	Grade of sub-grade mineral generation	-	-	-
3h	Manual / Mechanised method adopted for segregating from	Mechanised method by HEMM	Mechanised method by HEMM	-

	ROM			
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil	Nil	-
3j	Provision of drilling & blasting in mineral benches	Nil	Nil	-
3k	Provision of mining machineries in mineral benches	Ripper Dozer, Excavator, Dumpers & Wheel Loaders	Ripper Dozer, Excavator, Dumpers & Wheel Loaders	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes Bench Height:7m Bench width:12m	Yes Bench Height:7m Bench width:12m	-
3m	Total area covered under excavation/pits in (Ha)	53.5129 Ha	53.5129 Ha	-
3n	Ore to OB ratio for the pit/mine during the year	1:4.08	1:3.08	-
3o	Total area put in use under different heads at the end of year in (Ha)	Mining- 53.5129 Waste dump- 18.7978 Human Settlements- 12.7584 Others-Unused- 14.2218	Mining- 53.5129 Waste dump- 18.7978 Human Settlements- 12.7584 Others-Unused- 14.2218	-
3p	Production of ROM mineral during last five-year period, as applicable	2013-14=0 2014-15=0 2015-16=680939 tons 2016-17=421000 tons	2013-14=0 2014-15=0 2015-16=388190 tons 2016-17= 404668 tons	-
3q	General remarks of inspecting officer on method of mining etc.	Nil		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Top soil- Nil OB-1716000 tons MR-101000 tons	Top soil- Nil OB-1247440 tons MR-84155 tons	-
4b	Location of topsoil, OB & mineral reject dumps	E-383750 to 383880 N-1726000 to 1726100	E-383750 to 383880 N-1726000 to 1726100	-
4c	Number of dumps within lease area and outside lease area	1 dump within lease area	1 dump within lease area	-

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Within UPL	-
4e	Number of active & alive dumps	Nil	Nil	-
4f	Number of dead dumps	Nil	1	-
4g	Number of dumps stabilised	Nil	1	-
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain all along the toe of the dump	Garland drains are made all along toe of backfilled stages.	-
4i	Length of Retaining wall or garland drain all along dump	Boulder wall-315 m Garland Drain-1125m	Boulder wall - Nil Garland Drain-75m	-
4j	Number of settling ponds	1	Nil	-
4k	Specific comments of inspecting officer	Technical advice may be taken to control the pit slope stability.		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	Backfilling carried out in exhausted pit
5b	Area under backfilling of mined out area	7.0364 Ha	3.8113 Ha	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	-
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	-
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil		-

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). Details should be given in the format as given in Annexure-20.		Annual PMCP report submitted on time.	-

6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	Nil	Nil	-
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	ii) 1.72 Million tonnes iii) Nil iv) Nil	ii) 1.25 Million tonnes iii) Nil iv) Nil	-
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Nil	Nil	-
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Within permissible limits	Within permissible limits	-
6f	General remarks of inspecting officer on PMCP compliance & progressive	-		

7.0 Mineral Conservation

SN	Item	Proposals	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	Normal Ore=>54% Fe Mineral Reject=>45% to <54% Fe	Normal Ore=+54% Fe Mineral Reject=+45% to -54% Fe	-
7d	Any beneficiation process at mines	Nil	Nil	-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	satisfactory		-

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	-
8b	Concurrent use or storage of topsoil	Nil	Nil	-
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	Nil	Nil	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Nil	provided	-
8g	Survival rate	-	70%	-
8h	Water sprinkling on roads to control airborne dust	Water Tanker used for sprinkling on roads to control airborne dust	Water Tanker used for sprinkling on roads to control airborne dust	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are			

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted up to – June 2017 A.R. submitted for 2016-17	

S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes	Provided & appointed	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	yes	given	
9d	Scrutiny of Annual return on afforestation	yes	yes	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)			
9f	Scrutiny of Annual return on ROM stock and/or graded ore			
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	yes	Cost of production observed to be in higher side w r to other mines.	
9i	Scrutiny of Annual return on fixed assets	yes	given	
9k	Scrutiny of Annual return on mining machineries	yes	given	

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 :

Sd/-

(SURESH PRASAD)

Indian Bureau of Mines