

MCDR INSPECTION REPORT

1) Name of Inspecting officer:	G. S. Kannan
2) Designation	Junior Mining Geologist
3) Accompanying mine official with designation	1) Shri. K B Haldankar (Mine Superintendent) 2) Shri. Mohan Gajalekar (Chief Manager) 3) Shri. Rajesh Prasad (Mines Manager)
4) Date of Inspection	15/06/2017
5) Date of Previous Inspection	08/10/2015

General Information

Sl.No	Particulars	Details
1	Name of the Mine	Jaquela Ou Jacadevicho Mollo Mine (Tc.No.84/52)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Lease Area: 95.39 Ha Forest Area: Nil Non Forest Area: 95.39 Ha
3	Minecode	30GOA01074
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/873/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. Bandekar Brothers Pvt Ltd. Suvarn Bandekar Building Swatantra Path, P.B. No. 11, Vasco-da-gama, Goa- 403 802. Telephone No : (0832) 2512557 Fax No : 91 (0832) 2513431 E-mail : secretariat@bandekar.in
6	Village	Pale
7	Taluka/ Mandal	Bicholim
8	District	North Goa
9	Pincode	403105
10	State	Goa
11	Post office	Pale
12	Nearest police station	Bicholim
13	Nearest Railway station	Collem
14	Date of Grant of Mining Lease	
15	Date of Execution	
16	Date of opening of Mine	
17	Date of first Renewal, if applicable and its period & expiry	For 20 years upto 21.11.2007
18	Date of second Renewal, if applicable and its period & expiry	For 20 years upto 21.11.2027
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Nil
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri. Suvarn R Bandekar

21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri. Kishor B Haldankar Date of appointment – 16/10/2015
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri. Rajesh Prasad Kushwaha First Class Mines Manager Date of appointment - 01/01/2016
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri. Upenda K Prasad, B.E.Mining, Date of appointment – 02/11/2015
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes appointed as per Rule.
25	Date of Approval of Mining Plan/ Modified Mining Plan with five-year period and specific condition in approval letter, if any.	MMP/MECH-52/GOA/2015-16 Dt 14/12/2015. (Period 2013-2014 to 2017-2018)
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

Sl. No	Item	Proposals	Actual Work	Remarks
A. EXPLORATION:-				
1a	Backlog of Previous Year	The proposal was to drill 13 boreholes with 650m in Previous approved Plan	9 Boreholes has been drilled during 2010-2012 with 647m.	Form-J has been submitted
1b	Exploration Over Lease area for Geological Axis 1 or 2	Additional exploration of 8 boreholes has proposed in modified mining plan.	Additional exploration is not carried out after re-commencement of mining operations in September 2015. Area explored under G-1 category is 63.34 Hect. Total 129 boreholes were drilled since 1977 till date.	Violation has been issued
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 129 boreholes were drilled. Total Rs. 111.12 lac was spent on exploration.	

1d	Balance area to be explored to bring Geological axis 1 or 2	Exploration was carried out at 100m X 50m grid interval. Additional exploration was proposed in 50m X 50m	Exploration was carried out at 100m X 50m grid interval. Balance area of 32.05 hect area has to be explored for availability of ore from G-3 to G-1.	
1e	Balance reserves as on 01/04/2017	As on 01.04.2017 Proved Mineral Reserves (111) = 8375860 Tons Probable Mineral Reserves (122) = 1765740 Tons	As on 01.04.2017 Proved Mineral Reserves (111) = 9113770 Tons Probable Mineral Reserves (122) = 1765740 Tons	Hence there is no mining activity; R & R has not been changed.
1f	General remarks of inspecting officer on geology, exploration etc.	The deposit is part of Pale Velguem Deposit	The general Structure of Ore body is folded along both longitudinal & lateral directions.	For the presently, no exploration proposals drawn.

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B. DEVELOPMENT:-				
2a	Location of development w.r.t. lease area	S-350 to 850/ E-100 to 300	S-350 to 850/ E-100 to 300	
2b	Separate benches in topsoil, overburden and mineral	7 Bench's Proposal in Both Ore & OB	Worked in Single bench only	
2c	Stripping ratio or ore to OB ratio	1 : 1.65	1 : 0.03	
2d	Quantity of topsoil generation in m3	Nil	Nil	No Top Soil is Existing
2e	Quantity of overburden generation in m3	137400 m3/ 369000 Tons	Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Proposed 137400 m3 from 7 benches	Developed only 4000 tons for single bench	Due to Local Problem & Transporter issue, mine developed quantity is very less.

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C. EXPLOITATION:-				
3a	Number of Pit Proposed for Production	Development and production was proposed in Pit-3. In between S-350 to 850/ E-100 to 300	Development and production are carried out as per proposed area, but quantity not achieved.	

3b	Quantity of ROM mineral production proposed	The total target of ROM Production was 369000 tons during 2016- 2017 as per distribution from lessee on capping on EC limit.	Only 90 Tons has been achieved.	After mines have started the working, due to Local Problem & Transporter issue the mine has temporary discontinued.
3c	Recovery of Sailable/ Usable Mineral from ROM Production	100 %	Nil	
3d	Quantity of mineral reject generation	No Proposal	Nil	
3e	Grade of mineral reject 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.	Because of Non-Working, Mobile screening is not in use.	
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	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- 4 No Ripper Dozer - 1 No Dozer – 1 No Truck – 10 No W/ Loader – 3 No Water tanker - 3 No Mobile Screen – 1 No Water Pump – 1 No Portable generator – 3 No	Machineries are present but not in use because of temporary discontinued.	
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	44.83 hect areas are under Pit and no additional hect is required during this plan period.	44.83 hect areas are under Pit only.	
3n	Ore to OB ratio for the pit/ mine during the year	1 : 1.65	1 : 0.03	

3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2017. Mines = 44.83 hect Dump = 5.15 hect Mineral Storage = 3.62 hec Infrastructure = 0.13 hec Mine road = 2.22 hect Green belt = 6.01 hect Township = 1.38 hect Unused = 32.05 hect	Land use Pattern as on 01.04.2017. Mines = 44.83 hect Dump = 5.15 hect Mineral Storage = 3.62 hec Infrastructure = 0.13 hec Mine road = 2.22 hect Green belt = 6.01 hect Township = 1.38 hect Unused = 32.05 hect	There are no Changes in land use Pattern because of Non-Working.
3p	Production of ROM mineral during last five-year period, as applicable	2016-2017 = 369000 tons 2015-2016 = 369000 tons 2014-2015 = Nil 2013-2014 = Nil 2012-2013 = 799000 tons	2016-2017 = 90 Tons 2015-2016 = Nil 2014-2015 = Nil 2013-2014 = Nil 2012-2013 = 210799 Tons	During the Period 2012 to 2015, the Mine was not working due to want of statutory order
3q	General remarks of inspecting officer on method of mining etc.	Nil	Nil	

Sl. No	Item	Proposals	Actual Work	Remarks
D. SOLID WASTE MANAGEMENT - DUMPING:-				
4a	Separate Dumping of Topsoil, OB and Mineral Rejects	There is no Topsoil and Mineral rejects, only OB is proposed as temporary backfilling inside the bottom of pit.	There is no backfilling as per proposal.	Due to less development quantity, the backfilling won't achieve.
4b	Location of Topsoil, OB and Mineral Rejects Dumps	North of Pit no-3 & Pit no-6	Nil	
4c	Number of Dumps within Lease & Outside Lease area	Lease area = 2 Dumps Non Lease area = Nil	Lease area = 2 Dumps Non Lease area = Nil	
4d	Location of Dumps, within Ultimate Pit Limit (Rule-16)	Dump No.1: Northern Side of Lease area Dump No.2: South western side of Lease area. Both are outside UPL	Dump No.1: Northern Side of Lease area Dump No.2: South western side of Lease area. Both are outside UPL	
4e	Number of Active & Alive Dumps	Active Dump = Nil Alive Dump = Nil	There is no active dump within lease area for waste dumping.	Now there is no dumping proposal in Approved plan and only Backfilled has been proposed
4f	No of Dead Dumps	Nil	Two	
4g	No of Dumps Established	Nil	Two	
4h	Whether Retaining Wall or Garland drain along Dumps are there	Garland drain, Settling Pond was proposed on different terraces of Backfilled area to avoid wash-off.	Retaining walls, Garland drain, Settling ponds are constructed as per proposal.	
4i	Length of Retaining Wall or Garland drain along Dumps	500 mts length of Retaining wall & 900m of Garland drainage proposed	Retaining walls, Garland drain, Settling ponds are constructed as per proposal.	Existing retaining wall all along the dump & roads are maintenance.

4j	No of Settling tanks	8 Check dams proposed	8 Check dams have constructed.	
4k	Specific comments of inspecting officer on waste dump management	Nil	There is no generation of Topsoil and Mineral rejects. OB waste has proposed temporary backfilled inside the Pit. Trench's, Settling Pond is maintained and cleaning was done to avoid wash off.	

Sl. No	Item	Proposals	Actual Work	Remarks
E. SOLID WASTE MANAGEMENT - BACKFILLING:-				
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	Due to less development quantity, the backfilling won't achieve.
5b	Area under backfilling of mined out area	13.17 hect	13.17 hect	Due to less development quantity, backfilling has not done and no changes in area
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil	13.17 hect has been backfilled from 2001.	

Sl. No	Item	Proposals	Actual Work	Remarks
F. PROGRESSIVE MINE CLOSURE PLAN:-				
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	It should be on or before 1st July every year.	Submitted within time	
6b	Management of worked/ mined out benches i) Area available for rehabilitation (ha)	i) Mineral is persisting in pit bottom and temporary backfilling is proposed in it for Void available in this Pit No-3 of Northern side and Pit No-6	i) As per proposal there is no backfilling due to Non-working of Mines.	

	<p>ii) Afforestation done (ha)</p> <p>iii) No. of saplings planted during the year</p> <p>iv) Cumulative no. of plants</p> <p>v) Any other specific method of rehabilitation</p> <p>vi) Cost incurred on watch & care during the year</p>	<p>ii) 1.0 in existing dump</p> <p>iii) 1600 Gap filling Plant</p> <p>iv) Total 50000 saplings were proposed during last approved document period from 2008-09 to 2012-13.</p> <p>v) Nil</p> <p>vi) Nil</p>	<p>ii) Gap fillings on dumps</p> <p>iii) 6000 Plants has planted</p> <p>iv) Total 95185 saplings were planted during 2008-09 to 2012-13 .</p> <p>v) Nil</p> <p>vi) Nil</p>	<p>Cumulatively 235428 plants has planted within lease area and 277357 plants outside the lease area</p>
6c	<p>Compliance on reclamation and rehabilitation by backfilling</p> <p>i) Voids available for backfilling (L X B X D)</p> <p>ii) Void filled by waste/ tailings</p> <p>iii) Afforestation on the backfilled area</p> <p>iv) Rehabilitation by making water reservoir</p> <p>v) Any other specific means</p>	<p>i) Temporary backfilling is proposed in it for Void available in Pit No-3 of Northern side and Pit No-6</p> <p>ii) Nil</p> <p>iii) Nil</p> <p>iv) Nil</p> <p>v) Nil</p>	<p>i) Nil</p> <p>ii) Nil</p> <p>iii) Nil</p> <p>iv) Nil</p> <p>v) Nil</p>	<p>Cumulatively 235428 plants has planted within lease area and 277357 plants outside the lease area</p>
6d	<p>Compliance of Rehabilitation of waste land within lease</p> <p>i) Afforestation</p> <p>ii) Area rehabilitated (ha)</p> <p>iii) Method of rehabilitation</p>	<p>i) Nil</p> <p>ii) Nil</p> <p>iii) Nil</p>	<p>i) Nil</p> <p>ii) Nil</p> <p>iii) Nil</p>	
6e	<p>Compliance of Environmental monitoring (core zone & buffer zone)</p>	<p>Quarterly environment monitoring is required and report has to be sent to IBM Regional office.</p>	<p>Quarterly environment monitoring is carried out through own as well as private agency.</p>	
6f	<p>General remarks of inspecting officer on PMCP compliance & progressive closure operations</p>		<p>Even the Mine is nonworking from 2012. They have taken more protective measures as per PMCP</p>	<p>Cumulatively 241428 plants has planted within lease area and 277357 plants outside the lease area</p>

Sl. No	Item	Proposals	Actual Work	Remarks
G. MINERAL CONSERVATION:-				
7a	ROM mineral dispatch or grade wise sorting within lease area	As per approved mining plan proposed ROM was classified as High Grade ore +60% Fe, Low Grade Ore +55-60% Fe and below +45-55% 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 +60% Fe, Low Grade Ore +55-60% Fe was proposed in modified mining plan.	Nil	
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 & beneficiation issues	Nil	After mines have started the working, due to Local Problem & Transporter issue the mine has temporary discontinued.	

Sl. No	Item	Proposals	Actual Work	Remarks
H. ENVIRONMENT:-				
8a	Separate removal and utilization of topsoil	No Proposal	Nil	
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines	Proposal was to temporary backfill the waste inside the pit due to non-availability of other area for dumping and mineral is persisting in the pits.	Nil	
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	Existence of plantation is there on slopes of the dump, along the road and other part of lease area. Cumulatively 238628 plants proposed.	6000 Plants has been planted during the plan period. Cumulatively 241628 plants were achieved.	Cumulatively 241428 plants has planted within lease area and 277357 plants outside the lease area
8g	Survival rate	70%	Survival rate is around 60 to 70% for previous plantation	
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for waster 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.	Cumulatively 241428 plants has planted within lease area

9/9

Sl. No	Item	Comments		Remarks
I. COMPLIANCE OF RULE-45:-				
9a	Status of Submission of Monthly & Annual Returns	MR Submitted up to = May 2017 AR Submitted up to = 2016-2017		Both Annual & Monthly returns are submitting in online system.
Sl. No	Item	Details Given in A.R	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, Geologist & Surveyor are appointed.	During Inspection geologist has been terminated.	These Technical people are working as part time in other Non-working mines also.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use pattern as given as per approved modified 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	Within Lease = Nil Outside Lease = Nil	6000 Plants has been planted during the plan period. Cumulatively 241628 plants were achieved.	It is advice to enter the data correctly. The lessee has actually planted but not shown in A.R.

9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No Proposal	Nil	Due to No Production & development, there is no mineral reject generation
9f	Scrutiny of Annual return on ROM stock and/or graded ore	90 tons	Due to Non-Working from 2013, there is no stock and all are nil only.	After mines have started the working, due to Local Problem & Transporter issue the mine has temporary discontinued.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex.Mine Price is Zero	Due to less production and no dispatch the Ex.Mine Price cost is Zero.	
9i	Scrutiny of Annual return on fixed assets	Fixed assets have filled	Fixed asset have filled properly.	
9k	Scrutiny of Annual return on mining machineries	Shovel & Wheel Loader	They are used for maintain of road and protective measures only.	

Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

Violation has issued under Rule 11(1) & 29 of MCDR, 2017 on 29/06/2017.

G.S.Kannan
Junior Mining Geologist