

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Asota Mewasa Bauxite Mines of M/s. Bombay Minerals Limited
1(b)	Name of Inspecting Officer	Sanjay M. Girhe
1(c)	Designation of Inspecting Officer	Sr. Mining Geologist
1(d)	Accompanying Mines Representatives	Shri Gunanand Roy (Agent of Mine) Shri K K Choudhary (Mines Manager)
1(e)	Type of Inspection	Review of Mining Plan
1(f)	Date of Inspection	28.09.2017
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	682.3892 Hect
3	Minecode	07GUJ07002
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/902/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. Bombay Minerals Limited. Jamnagar Dwarka Highway, Khambhalia-361305, Dist. Devbhumi Dwarka, State: Gujarat. Email: bmlamm_nan@yahoo.com Phone : 02833-236893/94 Fax: 02833-234053
6	Village	Ran, Mewasa, Mota Asota, Haberdi & Khakharda
7	Taluka/Mandal	Kalyanpur
8	District	Devbhumi Dwarka
9	Pin code	361315
10	State	Gujarat
11	Post office	Mewasa
12	Nearest police station	Bhatia
13	Nearest Railway station	Bhatia
14	Date of Grant of Mining Lease	26.01.1958
15	Date of Execution	09.08.1958
16	Date of opening of Mine	09.08.1958
17	Date of first Renewal, if applicable and its period & expiry	Date of first Renewal Application- 08/08/1977 Period- 20 Years Expiry Date-08/08/1998
18	Date of second Renewal, if applicable and its period & expiry	Date of Second Renewal Application-6/08/1997 Period- 20 Years Expiry Date-First Renewal Order made on 05.02.1979, Second Renewal applied on 06.08.1997 form D issued on 13.08.1997 and its consent letter issued on 01.10.2001 from State Government to us while lease under deemed renewal up to 31/03/2030 under MMDR-2015
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	-
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Name of the Nominated Owner-Shri Hemul R Shah(Nominated owner under section 76 of mines act 1952) Address-302/303,Rahul Enclave,A-Wing,Saibaba Nagar,Borivali-West,Mumbai-400092 Phone- 02833-236893/94 Fax No- 02833-234053
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Gunanand Roy (Agent of Mine) M/s. Bombay Minerals Limited, Jamnagar Dwarka Highway, Khambhalia-361305, Dist. Devbhumi Dwarka, Gujarat Email: bmlamm_nan@yahoo.com Phone : 02833-236893/94 Fax: 02833-234053 Date of Appointment:24.08.2017

22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri K K Choudhary (Mines Manager) M/s. Bombay Minerals Limited, Jamnagar Dwarka Highway, Khambhalia-361305, Dist. Devbhumi Dwarka, Gujarat Email: bmlamm_nan@yahoo.com Phone : 02833-236893/94 Fax: 02833-234053 Date of Appointment: 15.02.2009 Qualification: B.E. (Mining)
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri K K Choudhary (Mines Manager) M/s. Bombay Minerals Limited, Jamnagar Dwarka Highway, Khambhalia-361305, Dist. Devbhumi Dwarka, Gujarat Email: bmlamm_nan@yahoo.com Phone : 02833-236893/94 Fax: 02833-234053 Date of Appointment: 15.02.2009 Qualification: B.E. (Mining)
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	We have Appointed to Shri K.K Choudhary as Mining Engineer and Mr Vivek Shah as a Geologist to satisfy the rule 42 & carrying out their duties as per rule 43 & 44.
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	-
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Date of Approval of Scheme of Mining- 01/01/2014 Five-year period-2013-14 to 2017-18 Specific condition in approval letter, if any- Annexure No 1(Scheme of Mining Approval Letter)
27	Mineral(s) granted in lease and proved for mining	Bauxite
28	Method of Mining(Open cast, Underground)	OTFM
29	Category (Fully Mechanised, Others or Manual)	Category-A (OTFM)
30	Captive/Non Captive	Captive

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

Exploration

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
1a	Backlog of previous year	In approved Mining scheme it was proposed to put 20bore holes and 40 nos trial pits during Mining Scheme Period. In 2016-17 total 8 trial pits were proposed.	Lessee has put trial pits only during mining scheme period. No drilling has been carried out during scheme period; Data generated by pitting work were utilized in reserve estimation. In 2016-17 Lessee has carried out all 8 pits which was proposed for year 2016-17	
1b	Exploration over lease area for Geological axis 1 or 2.	-	425.7013 Ha.	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	-	Exploration agency-Lessee Himself has done exploration work M/s. Bombay Minerals Ltd., Jamnagar-Dwarka Highway, Jam-Khambhalia 361 305, Dist: Devbhumi Dwarka, State: - Gujarat. Phone No-02833-236893/94	

			Email- bmlamm_nan@yahoo.com Fax No-02833-234053	
1d	Balance area to be explored to bring Geological axis in 1 or 2		Balance area to explore 256.6879 Ha	
1e	Balance reserves as on 01.04.2017	-	Total Mineral reserve 1.Proved Mineral Reserve(111) =45290852 MT 2.Probable Mineral reserve(122) =81,52,605 MT Total-5,34,43,457 MT Balance reserve-5,34,43,457 As on 1/04/2017	
1f	General remarks of inspecting officer on geology, exploration etc.			

2.0 Development

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
2a	Location of development w.r.t. lease area	Bhopamandhi Khakharda-I Karandhar-N	Bhopamandhi Khakharda-I Karandhar-N	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches in ore & top soil, overburden proposed	Achieved as per the proposals	
2c	Stripping ratio or ore to OB ratio	2016-17= 1:0.01	2016-17= 1:0.0012	
2d	Quantity of topsoil generation in m ³	2016-17= 4850 m ³ (Soil is consider as OB)	2016-17= 12050 m ³ (Soil is consider as OB)	
2e	Quantity of overburden generation in m ³	2016-17= 102818 m ³ (Soil is consider as OB)	2016-17= 12050 m ³ (Soil is consider as OB)	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.			

3.0 Exploitation

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
3a	Number of pits proposed for production	2016-17 total no. of trial pits proposed =08	08 Trial pits exploration carried out by lessee	
3b	Quantity of ROM mineral production proposed	2016-17=3956000 MT	2016-17=1839013 MT	
3c	Recovery of salable/usable mineral from ROM production	2016-17 = 3758200 MT	2016-17=1839013 MT	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral reject generation and threshold value declared	NIL	NIL	
3f	Quantity of sub-grade mineral generation	In the proposed Mining there is no possibility of production of subgrade material hence no need for making provision of stacking of subgrade material	NIL	
3g	Grade of sub-grade mineral generation	In the proposed Mining there is no possibility of production of subgrade material hence no need	NIL	

		for making provision of stacking of subgrade material																				
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual																			
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 proposed to be required for 30% of ROM bauxite production only.	Quantity of explosive consumed during year are (Small dia. Up to 32 mm) 1. Slurry explosive -96.50 Kg. 2. Detonators (Ordinary)- 151 nos 3. Safety fuse-241.56 Mts 4. Detonating Fuse-3255 Mtr 5. Ammonium Nitrate - 950 Kg.																			
3k	Provision of mining machineries in mineral benches	Excavator (2M ³)-8 nos Tipper(25MT)-15 nos Jack Hammer(32mm)-14nos Compressor(100cft/m)-5 nos Water Tanker-2 nos	Excavator(2M ³)-4 nos Tipper(25MT)-9 nos Jack Hammer (32mm)-4nos Compressor (100cft/m)-2nos Water Tanker-4 nos																			
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	<table border="1"> <thead> <tr> <th>Number of bench</th> <th>In ore</th> <th>In, O B/W aste</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td>Nil</td> </tr> <tr> <th>Height of bench</th> <td>4m</td> <td>Nil</td> </tr> </tbody> </table>	Number of bench	In ore	In, O B/W aste	1	1	Nil	Height of bench	4m	Nil	<table border="1"> <thead> <tr> <th>Number of bench</th> <th>In ore</th> <th>In, O B/W aste</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td>Nil</td> </tr> <tr> <th>Height of bench</th> <td>4m</td> <td>Nil</td> </tr> </tbody> </table>	Number of bench	In ore	In, O B/W aste	1	1	Nil	Height of bench	4m	Nil	
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3m	Total area covered under excavation/pits	327500 M ²	18390 M ²																			
3n	Ore to OB ratio for the pit/mine during the year	1:0.01	1:0.0012																			
3o	Total area put in use under different heads at the end of year	Pit-277.6952 ha. (total scheme period) Waste/reject 8.4000ha. Others-16.8212	178.431 Ha																			
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2013-14=3917728 MT Yr-2014-15=3975458 MT Yr-2015-16=3930010 MT Yr-2016-17=3956000 MT Yr-2017-18=3939878 MT Total-19719074 MT	Yr-2013-14=1998742 MT Yr-2014-15=183964 MT Yr-2015-16=1839940 MT Yr-2016-17=1839013 MT Yr- 2017-18=114779 MT																			
3q	General remarks of inspecting officer on method of mining etc.	Nil																				

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Proposed as 86000 M3	The Overburden as soil has utilized in plantation, stacking on old plantation, garland maintains well as road repairing work	
4b	Location of topsoil, OB & mineral reject dumps	Not Proposed	Nil	
4c	Number of dumps within lease area and outside lease area	Nil	Nil	
d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil	Nil	
4e	Number of active & alive dumps	Nil	Nil	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Nil	
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer	Nil		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling of waste material will be done in such area where bauxite mineral has been mine out up to complete thickness & no bauxite mineral is available	Backfilling of waste material is done in such area where bauxite mineral has mine out up to complete thickness & no bauxite mineral is available	
5b	Area under backfilling of mined out area	Area under backfilling In 2016-17 = 19261M ²	Area under backfilling In 2016-17 = 312 M ²	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use of top soil proposed. 2016-17= 4850 m ³	312 M ² area has backfilled by OB/Waste Soil is spread over backfilled area.	
5d	Total area fully reclaimed & rehabilitated	Proposed as 19261 M2	312 M ² area has backfilled by OB/Waste Soil is spread over backfilled area.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
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.	Yes	We have submitted	

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	(i)1736818m ³ (ii)107863 m ³ (iii)0.1500 ha.& 300 sapling (iv) 30.8239 ha. (v) 100	(i)NIL (ii)NIL (iii)0.18 ha.& 360 saplings (iv) NIL (v) 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)	Air, Water & Noise quality monitoring is proposed at regular interval.	Air, Water & Noise quality monitoring is carried out at regular interval.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Nil		

7.0 Mineral Conservation

SN	Item	Proposals (2016-17)	Actual work (2016-17)	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	manual	manual	
7c	Different grade of mineral sorted out at mines	Usually this bauxite is hand sorted within the quarry for different grade, such as abrasive grade, Ceramic grade and cement grade (Low grade).	Usually this bauxite is hand sorted within the quarry for different grade, such as abrasive grade, Ceramic grade and cement grade (Low grade).	
7d	Any beneficiation process at mines	Not Proposed.	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Nil		

8.0 Environment

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	In General, area proposed for Mining area devoid of top soil except in few patches. Soil will be first scraped and stacked on statutory barrier & proposed to spread over	2016-17 =1.35 ha area has backfilled by 12050 m ³ OB/Waste Soil is spread over backfilled area.	

		backfilled area.											
8b	Concurrent use or storage of topsoil	top soil propose to spread on backfilled area	312 M ² area has backfilled by OB/Waste Soil is spread over backfilled area.										
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	312 M ² area has backfilled by OB/Waste Soil is spread over backfilled area.										
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	The waste generated is proposed to be backfilled in mine out land & top soil spread over it.	312 M ² area has backfilled by OB/Waste Soil is spread over backfilled area.										
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phase wise reclamation & rehabilitation proposed.	1.35 ha area has backfilled by 12050 m ³ OB/Waste Soil is spread over backfilled area. We have planted 360 nos of sapling in 0.18 ha backfilled area										
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	300 saplings proposed every year. Year wise plantation program Can Summarized as follows <table border="1" data-bbox="638 896 941 1097"> <tr> <td>Year</td> <td>No of sapling</td> <td>Area M²</td> </tr> <tr> <td>2016-17</td> <td>300</td> <td>1500</td> </tr> <tr> <td>2017-18</td> <td>300</td> <td>1500</td> </tr> </table>	Year	No of sapling	Area M ²	2016-17	300	1500	2017-18	300	1500	The Overburden as soil has utilized in plantation, stacking on old plantation, garland maintains well as road repairing work We have planted 360 nos of sapling in 0.18 ha backfilled area	
Year	No of sapling	Area M ²											
2016-17	300	1500											
2017-18	300	1500											
8g	Survival rate	-	Achieved as 75%										
8h	Water sprinkling on roads to control airborne dust	It is proposed to sprinkling water on haul road	We are sprinkling water on haul road regularly										
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Nil											

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks	
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – Dec-2017 A.R. submitted upto- Year 2016-17	Submitted	
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	Detail of Mining Engineer, Geologist and Mines Manager in Annual Return 2016-17 are given	Nil	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details on land use pattern for area under pits, reclaimed area, dumps etc. are given in Annual Return 2016-17	Nil	
9d	Scrutiny of Annual return on afforestation	Detail of afforestation in Annual Return 2016-17 are given	Nil	
9e	Scrutiny of Annual return on mineral reject generation	NIL	Nil	

	(Grade & quantity)			
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Detail of ROM stock and/or graded ore are given in Annual Return 2016-17	Also advice to incorporate the same in submitted MP	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Detail of sale value, Ex. Mine price & production cost are given in Annual Return 2016-17	Nil	
9i	Scrutiny of Annual return on fixed assets	We have given detail of fixed assets in Annual Return 2016-17	Nil	
9k	Scrutiny of Annual return on mining machineries	We have given detail of mining machineries in Annual Return 2016-17	Details on in-house & contractual machineries deployed in mining operations asked to provide in MP	

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

No outstanding violations in respect of previous inspections observed whereas current inspection was carried out on dtd 28.09.2017 in connection with Review of Mining Plan. During inspection, no violations were pointed out.
