

## MCDR INSPECTION REPORT

### 1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Mothala Balachod Bauxite Mines (280.76Ha)
1(b)	Name of Inspecting officer & Designation	G. Ram, Sr.Assistant Controller of Mines
1(c)	Accomp.official	Shri SG Patel & VH Solanki, MM
1(d)	Date & Type of Inspection	27.10.2018 & Star Rating
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	280.76Hect. ( Non-Forest) Survey No. 336-38,246-48
3	Mine code	07GUJ10016
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/727/2011
5	Name of the lessee, Address, phone, email and fax number	Gujarat Mineral Development Ltd., Khanij Bhavan, 132 Ft Ring Road-Vastrapur, Ahemdabad-380052; Ph-(02834) 282289 Email:gadhsisa_2@gmdcltd.com
6	Village	Mothala, Nani Balachod
7	Taluka/Mandal	Abadasa
8	District	Kutch
9	Pin code	370465
10	State	Gujarat
11	Post office	Nani Balachod
12	Nearest police station	Naliya
13	Nearest Railway station	Bhuj
14	Date of Grant of Mining Lease	12-01-2006 MCR/1591/G-58/703/CHH for 30 Year
15	Date of Execution	07-03-2007
16	Date of opening of Mine	01-02-2007
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
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 & appointment	Shri Arunkumar Solanki, GMDC Ltd. "Khanij bhavan", 132 FT Ring Road, Vastrapur, Ahmadabad., Appointment- 24-06-2016
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri S G Patel, Bauxite Project-Gadhsisa, Ta-Mandvi, Dis-Kutch, 370445, Mobile- 9727792510 Email: gadhsisa@gmdcltd.com Appointment- 01-11-2015
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri V H Solanki [Mine Manager],GMDC, CB Project-Gadhsisa;Post-Gadhsisa; Taluka-Mandvi;Dist-Kutch Gujarat 370445;9727792510, Email: <a href="mailto:gadhsisa_2@gmdcltd.com">gadhsisa_2@gmdcltd.com</a> ; <a href="mailto:srrathore@gmdcltd.co.in">srrathore@gmdcltd.co.in</a> Appointment- 03-11-2016
23	Name of the Mining Engineer, Qualification and total Exp. with Address, phone, email, fax number and date of appointment in mine	Shri V H Solanki, BE (mining Engg), Manager (Mines) Appointment- 14.11.2016
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri JD Raj, MSc Geology, Sr Manager(Geology) Appointment- 26.4.2018
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Letter No. 682(23)(941)/99-MCCM(N) UDP-14.10.1999
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Letter No. 684(4)(1)/MP-117/18-MDRD(N)GNR Dated- 01.5.2018 for the period of 2018-19 to 2020-21
27	Mineral(s) granted in ML proved for mining	Bauxite
28	Method of Mining(Opencast, Underground)	Opencast.
29	Category (Fully Mechanised, Others or Manual)	A-Category
30	Captive/Non Captive	Non Captive & Joint venture with Gujarat Credo Minerals Ltd

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

**Exploration**

SN	Item	Proposals (2018-19)	Actual work	Remarks
1a	Backlog of previous year	50 Boreholes of 20m depth each is proposed as earmarked.	50 Core borehole of 5-19m depth each done in 2015-16 against 39 proposed borehole.	Khanna & Associated 544 m Exploration Drilling done which cost Rs. 358070/- of 50 boreholes.
1b	Exploration over lease area for Geological axis 1 or 2.			
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not Proposed	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	The lease area has been explored 100% in G1/G2 level of exploration up to THV of mineral.		
1e	Balance reserves as on 01.3.2018	The reserves & resources estimated as on 01.04.2018 is 2.1221MT (G1)		
1f	General remarks of inspecting officer on geology, exploration etc.	NIL		

**2.0 Development**

SN	Item	Proposals (2018-19)	Actual work	Remarks
2a	Location of development w.r.t. lease area	Block-1, Pit No-1, 2 & Block-2, Pit No-5 As earmarked.	Mine workings done partly in Block No.1&1 in Pit No-1, 2 & 5 as earmarked	Lack of demand /lagging in prodn.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Proposed for separate bench	As proposed.	
2c	Stripping ratio or ore to OB ratio	1:0.0	1:0.0	
2d	Quantity of topsoil generation in m3	427M3 (Block-2)	NIL	
2e	Quantity of overburden generation in m3	Not Proposed	NIL	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Lagging in production due to lack of demand. During inspection, advised to mine representative to improve the aesthetic beauty/general cleaning & level of mine/pit area.		

**3.0 Exploitation**

SN	Item	Proposals (2018-19)	Actual work	Remarks
3a	Number of pits proposed for production	Block-1, Pit No-1, 2 & Block-2, Pit No-5 As earmarked.	Mine workings done partly in Block No.1&1 in Pit No-1, 2 & 5 as earmarked	Till Sept.18
3b	Quantity of ROM mineral production proposed	41987T	5159.4T	Entire ROM is utilised by proper sizing & sorting & blending
3c	Recovery of saleable/usable mineral from ROM production	Not proposed	NIL	
3d	Quantity of mineral reject generation	Not proposed	NIL	
3e	Grade of mineral reject generation and threshold value declared	Cut-off grade-About 40% Al <sub>2</sub> O <sub>3</sub> as per buyer's specification.	Mineral rejects are being utilised by proper sizing & sorting & blending as per buyer's specification.	
3f	Quantity of sub-grade mineral generation	Not Proposed	NIL	
3g	Grade of sub-grade mineral generation	Not Proposed	NIL	
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	Lab Analysis	Analysis done in house & outside agency both.	
3j	Provision of drilling & blasting in mineral benches	J/H drilling & blasting	J/H drilling & blasting, When requires	
3k	Provision of mining machineries in mineral benches	HEMM with Loader/JCB & Tipper Combination	Loader/Excavator/Rock Breaker and Tipper Combination are used.	

3l	Whether height of benches in OB and mineral suitable for method of mining proposed in MP/SOM	2.5-3.0 Meter	1.5-2.5 Meter	
3m	Total area covered under excavation/pits	0.832Ha/year	0.5Ha	Till sept.18
3n	Ore to OB ratio for the pit/mine during the year	1:0.0	1:0.0	
3o	Total area put in use under different heads at the end of year	4.16Ha area proposed in plan period.	Total excavated area is about 7.5 Hect. & others	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2014-15- 39135T Yr-2015-16- 41038T Yr-2016-17- 41682T Yr-2017-18- 41950T Yr-2018-19- 41987T(till)	Yr-2014-15- 02339 T Yr-2015-16- 0T Yr-2016-17- 36729T Yr-2017-18- 10042T Yr-2018-19- 5159.4T(till)	
3q	General remarks of inspecting officer on method of mining etc.	Lagging in production due to lack of demand.		

#### **4.0 Solid Waste Management-Dumping**

SN	Item	Proposals (2018-19)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Block-1, Pit No-1, 2 & Block-2, Pit No-5 As earmarked.	Mine workings done partly in Pit No-1, 2, 4, 5, 8 & 9 as earmarked in plate no. V-D & V-E due to lagging in production.	Till Sept. 18
4b	Location of topsoil, OB & mineral reject dumps	Topsoil-427M3 (Block-2) O/B-Not Proposed	Topsoil-NIL O/B-NIL	
4c	Number of dumps within lease area and outside lease area	Not Proposed	NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Proposed	NIL	
4e	Number of active & alive dumps	Not Proposed	NIL	
4f	Number of dead dumps	Not Proposed	NIL	
4g	Number of dumps stabilised	Not Proposed	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Not Proposed	NIL	
4i	Length of Retaining wall or garland drain all along dump	Not Proposed	NIL	
4j	Number of settling ponds	Not Proposed	NIL	
4k	Specific comments of inspecting officer	During inspection, advised to mine representative to improve the aesthetic/general cleaning & level of mine/pit area.		

#### **5.0 Solid Waste Management-Backfilling**

SN	Item	Proposals (2018-19)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed	NIL	Till Sept. 18
5b	Area under backfilling of mined out area	Not Proposed	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not Proposed	NIL	
5d	Total area fully reclaimed & rehabilitated	Not Proposed	NIL	
5e	General remarks of inspecting officer on backfilling, reclamation etc	NIL		

#### **6.0 Progressive Mine Closure Plan**

SN	Item	Proposals (2018-19)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly	Yes for 2017-18	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	Not Proposed	NIL	Survival rate is poor due to scarcity of water.
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	Not Proposed	NIL	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	0.6 Ha & 600No Plants 1600m fencing	0.5 Ha & 700 Plants NIL	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes	Monitoring is being carried out as per IBM guidelines.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Lagging in production due to lack of demand. During inspection, advised to mine representative to improve the aesthetic/general cleaning & level of mine/pit area.		

### 7.0 Mineral Conservation

SN	Item	Proposals (2018-19)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	41987T	5159.4T	Till Sept.18
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual Sorting	Manual Sizing & sorting	
7c	Different grade of mineral sorted out at mines	Yes	(i) PG ( $Al_2O_3 \geq 52\%$ ) (ii) NPG ( $Al_2O_3$ 40 to $<52\%$ ) (iii) Rejects size less than 10 mm	
7d	Any beneficiation process at mines	Not Proposed	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Due to scarcity of water in surrounding area /low rainfall, poor survival rate of plantation.		

### 8.0 Environment

SN	Item	Proposals (2018-19)		
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Directly Used For Plantation if any	Till Sept.18
8b	Concurrent use or storage of topsoil	Not Proposed	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	NA	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	NA	
8f	Baseline information on existence of plantation & additional plantation done	Not Proposed	Good aesthetic near mine office	
8g	Survival rate	Not Proposed	About 50%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
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 Online Monthly and Annual returns	M.R. Submitted up to till date A.R. for year 2017-18 is submitted on 11.6.2018		
S.N	Item	Details given in A.R.2016-17		Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri S R Rathore, ME Shri SA Pillai, (Geologist)	Sh. VH Solanki, ME WEF- 26.4.18 & .JD Raj, MSc Geology, WEF- 26.4.2018	<i>It was advised to Mine representative to online submit the AR correctly costing &amp; Ex Mine Price as per IBM guidelines in future.</i>
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit-7.35Ha Cumulative, Storage-7.75Ha,PMCP-3.2 Road & Infrastructure -1.7 Ha	-	
9d	Scrutiny of Annual return on forestation	600 Plants (70% Survival)	500Plants (30%) 700Plants (2018-19)	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	--	--	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	O/S-18335T, P-8015T, Disptch-4737T,C/S- 21613T (Avg45grade) & refectory grade-O/S-2412 ,P-2029,Disptach-0 ,C/s- 4441T	Directed to use the correct Ex Mine Price/Cost of Production as sale price published in GMDC site properly.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine Price- Rs 650/T &1700Rs/T (refectory) Cost of Production-Rs 1869.9/T		
9i	Scrutiny of Annual return on fixed assets	Given	Given	
9k	Scrutiny of Annual return on mining machineries	Excavator 200/Rock Breaker Dumper 17T ,Loader/JCB	Excavator 200/Rock Breaker, Tipper 17T, Loader/JCB	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: - Mine was inspected for evaluation of Star Rating templates of mines. No significant violation observed presently. Advised to lessee for correct reporting the Sale price/Ex mine price as per GMDC web site publication.