

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 SR Rathore & Brijesh Sandhyal, Tech. Person Rep.
1(d)	Date & Type of Inspection	15.03.2018 & RMP
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: gadhsisa_2@gmdcltd.com ; srrathore@gmdcltd.co.in 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 S.R.Rathore, BE (mining Engg), Manager (Mines) Appointment- 27.6.2016
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri DS Patel, MSc Geology, Sr Manager(Geology) Appointment- 24.4.2018
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. 682(23)(941)/99-MCCM(N) UDP Dated-14.02.2013 for the period of 2013-14 to 2017-18
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 (2016-17)& 2017-18	Actual work	Remarks
1a	Backlog of previous year	50 Boreholes of 20m depth each is proposed as earmarked. Not Proposed	50 Core borehole of 5-19m depth each done in 2015-16 against 39 proposed borehole.	Copy of form J & K is submitted to IBM under provision of MCDR, 2017 on 22.7.2016.
1b	Exploration over lease area for Geological axis 1 or 2.	Proposal made in next RMP for detail exploration as per MEMC Rule 2015	Part of lease area is explored by trenches/pits/boreholes etc.	Part of ML area is still remain for further exploration.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	50 Core borehole of 5-19m depth each done in 2015-16 against 50 proposed borehole.	Khanna & Associated 544 m Exploration Drilling done which cost Rs. 358070/- of 50 boreholes.	Part of ML area is still remain for further exploration.
1d	Balance area to be explored to bring Geological axis in 1 or 2	The part of lease area is still remains for exploration. Lessee has been proposed boreholes in present plan period.		
1e	Balance reserves as on 01.3.2018	The reserves & resources estimated as on 01.04.2018 is 2.171MT		
1f	General remarks of inspecting officer on geology, exploration etc.	NIL		

2.0 Development

SN	Item	Proposals (2016-17) & 2017-18	Actual work	Remarks
2a	Location of development w.r.t. lease area	Pit No-1, 2,4, 5, 8 & 9 As earmarked in plate no. V-D & V-E	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.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Proposed for separate bench Proposed for separate bench	Topsoil/OB/Mineral bench made separately	
2c	Stripping ratio or ore to OB ratio	1:0.45 1:0.53	1:0.02 1:0.005	
2d	Quantity of topsoil generation in m ³	Not in Proposal Not in Proposal	NIL	
2e	Quantity of overburden generation in m ³	19310 m ³ 22297 m ³	752m ³ 50m ³	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Violation of provision of Rules 26(2), 33, 55(1)(3) of MCDR,2017 pointed out for rectification.		

3.0 Exploitation

SN	Item	Proposals (2016-17) & 2017-18	Actual work	Remarks
3a	Number of pits proposed for production	Pit No-1, 2,4, 5, 8 & 9 As earmarked in plate no. V-D & V-E	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.	
3b	Quantity of ROM mineral production proposed	41682T 41950T	36729T 10042T	Entire ROM is utilised by proper sizing & sorting & blending
3c	Recovery of salable/usable mineral from ROM production	70% of ROM	NA	
3d	Quantity of mineral reject generation	30% of ROM	NIL	
3e	Grade of mineral reject generation and threshold value declared	Cut off grade-About 40% Al ₂ O ₃ 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 Not Proposed	NIL	
3g	Grade of sub-grade mineral generation	Not Proposed Not Proposed	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual Manual	Manual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Lab Analysis 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	J/H drilling & blasting	
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		About 7.35 Hect.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.45 1:0.53	1:0.02 1:0.005	
3o	Total area put in use under different heads at the end of year	Pit- 7.351 Ha Waste/reject-2.103 Ha Others-0.43 Ha	Pit- 7.351 Ha Waste/reject-2.103 Ha Others-0.43 Ha	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2013-14- 38000T Yr-2014-15- 39135T Yr-2015-16- 41038T Yr-2016-17- 41682T Yr-2017-18- 41950T(till)	Yr-2013-14- 35253 T Yr-2014-15- 02339 T Yr-2015-16- 0T Yr-2016-17- 36729T Yr-2017-18- 10042T(till)	
3q	General remarks of inspecting officer on method of mining etc.	Violation of provision of Rules 26(2), 33, 55(1) (3) of MCDR, 2017 pointed out for rectification.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2016-17) & (2017-18)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Pit No-1, 2,4, 5, 8 & 9 As earmarked in plate no. V-D & V-E	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.	
4b	Location of topsoil, OB & mineral reject dumps	Separate waste Dumping Proposed as earmarked in plate No.V-D & V-E.	Worked as proposal but Partly deviated.	
4c	Number of dumps within lease area and outside lease area	Within Lease area outside lease area	0, Mineral Stack-5 0	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Separate waste Dumping Proposed as earmarked in plate No. V-D & V-E.	NIL	
4e	Number of active & alive dumps	Not Proposed	NIL	
4f	Number of dead dumps	Not Proposed Not Proposed	NIL	
4g	Number of dumps stabilised	Not Proposed Not Proposed	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Not Proposed Not Proposed	NIL	
4i	Length of Retaining wall or garland drain all along dump	424 m Not Proposed	NIL	
4j	Number of settling ponds	Not Proposed Not Proposed	NIL	
4k	Specific comments of inspecting officer	NIL		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2016-17) & 2017-18	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed	NIL	
5b	Area under backfilling of mined out area	0.7060 Ha	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 (2016-17) & 2017-18	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly	Yes	Submitted on 30.06.2017	
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	0.4 Hact 500 Plants 8000 as per EC Manual with Drip system Rs. 15000 /-	0.4 Ha 750 Plants 9700 Manual with Drip system Rs 70,000/-	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	0.7060 Ha	NIL	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	0.4 Ha Plantation/ water Reserve	0.4 Ha Plantation/water Reserve	
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	Violation of provision of Rules 26(2), 33, 55(1) (3) of MCDR,2017 pointed out for rectification.		

7.0 Mineral Conservation

SN	Item	Proposals (2016-17) & 2017-18	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	41682T	36729T	
		41950T	10042T	
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	NIL		

8.0 Environment

SN	Item	Proposals (2016-17) & 2017-18			Actual w
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Directly Used For Plantation if any		
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 70%		
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	Violation of provision of Rules 11(1), 26(2), 45(5)(b) 33,55(1)(3) of MCDR,2017 pointed out for rectification.			

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 2016-17 is submitted on 29.5.2018		
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 & 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-11.22Ha Cumulative, Road & Infrastructure - 0.18 Ha	Pit-11.22Ha Cumulative, Road & Infrastructure - 0.18 Ha	
9d	Scrutiny of Annual return on forestation	347 Plants (70% Survival)	300Plants (70%)	
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-41284T, P-36729T, Disptch-41946.71T,C/S- 23555.028T	O/S-41284T, P-36729T, Disptch-41946.71T,C/S- 23555.028T	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine Price- Rs 650/T Cost of Production-Rs 724/T	Ex-Mine Price- Rs 650/T Cost of Production-Rs 724/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 examination of RMP & Presently violation of provision of Rules 26(2), 33 and 55(1)(3) observed & pointed out for rectification & subsequently lessee has been submitted the compliance report. The RMP is approved by this office on 01.5.2018 for next plan period.