

## MCDR INSPECTION REPORT

**1.0 GENERAL**

SN	Particulars	Details
1(a)	Name of the Mine	Roha kotda Bauxite Mines
1(b)	Name of Inspecting Officer & Designation	Sh. Pushpendra Gaur, Regional Controller of Mines, IBM
1(c)	Accompanying Mines Representatives	S.S.Kalotara
1(d)	Type of Inspection	MCDR INSPECTION
1(e)	Date of Inspection	20-12-2022
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	360-36-01 Hect.
3	Minecode	07GUJ10022
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/727/2011
5	Name of the lessee, Address, phone, email and fax number	Kotda Roha Bauxite Mine, Vil-Kotda (Roha) , Ta-Nakhtrana, Dis-Kutch
6	Village	Kotda (Roha)
7	Taluka/Mandal	Nakhtrana
8	District	Kutch
9	Pincode	--
10	State	Gujarat
11	Post office	Kotda (Roha)
12	Nearest police station	Mothala
13	Nearest Railway station	Bhuj
14	Date of Grant of Mining Lease	12-01-2006
15	Date of Execution	28-03-2006
16	Date of opening of Mine	28-03-2006
17	Date of first Renewal, if applicable and its period & expiry	Date of application- 10-01-2020 <b>Renewal of lease up to-27-03-2056</b>
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	<b>NA</b>
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Roopwant Singh (IAS) GMDC Ltd. "Khanij bhavan", 132 FT Ring Road, Vastrapur, Ahmedabad. 14-06-2021
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Sama Ram Rathore. <b>M/s. GUJARAT MINERAL DEVELOPMENT CORPORATION Ltd.</b> BAUXITE PROJECT, GADHSISA TAL- MANDVI- 370 445 KUTCH (Gujarat) Phone No:02834-282289, 282026 / Tele fax: 02834-282310 CIN : L14100GJ1963SGC001206, Website: www.gmdcltd.com, E-mail : gadhsisa@gmdcltd.com Date of Appointment. - 16/03/2022
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri S.S.Kalotara Kotda Roha Bauxite Mine (20-06-2022)
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri S.S.Kalotara (Diploma Mining 2 <sup>nd</sup> class manager) Bauxite Project-Gadhsisa, Ta-Mandvi, Dis-Kutch, 370445  (20-06-2022)
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as	Shri J.A.Patel (M.SC. GEOLOGY)  Appointment:11-07-2022

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	per rule 56 & 57.	
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	2021-22 to 2025-26 <b>(23/08/2021)</b>
26	Date of Approval of Scheme of Mining/ Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	23/08/2021 Vide No.684(4)(1)/MP-344/2021-22 GNR/1414
27	Mineral(s) granted in lease and proved for mining	BAUXITE
28	Method of Mining(Opencast, Underground)	Opencast.
29	Category (Fully Mechanised, Others or Manual)	'A'
30	Captive/Non Captive	Captive

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

### Exploration

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NA	
1e	Balance reserves as on 01.04.2022	1.186 Million tonne (1.286-0.1000)	1.253 Million tonne (1.286-0.033)	
1f	General remarks of inspecting officer on geology, exploration etc.	Explored upto G1 Axis.		

### 2.0 Development

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
2a	Location of development w.r.t. lease area	PIT-1,4&5	PIT-1,4	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	- NA -	- NA -	
2c	Stripping ratio or ore to OB ratio	1:0	NIL	
2d	Quantity of topsoil generation in m3	NIL	NIL	
2e	Quantity of overburden generation in m3	0	0	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Satisfactory.		

### 3.0 Exploitation

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
3a	Number of pits proposed for	PIT No-1,4 & 5	PIT No-1,4	(To achieve high

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	production			grade bauxite (Al <sub>2</sub> O <sub>3</sub> >52%)
3b	Quantity of ROM mineral production proposed	1,00,000MT	33437.692MT	Due to less market demand of NPG bauxite, production has been reduced
3c	Recovery of salable / usable mineral from ROM production	1,00,000MT	33437.692MT	
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	NIL	NIL	
3g	Grade of sub-grade mineral generation	NA	NA	
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	NA	NA	
3j	Provision of drilling & blasting in mineral benches	NIL	NIL	
3k	Provision of mining machineries in mineral benches	<b>Rock Breaker cum Excavator-02-</b> bucket capacity:0.9m <sup>3</sup> <b>Tipper-3</b> – capacity 17 tonnes <b>Front end loader-01-</b> capacity- 1.2 cum <b>Water Tanker-01</b>	<b>Dumper-04</b> - capacity 17 tonnes <b>Back hoe-01</b> <b>Front end loader-02</b> - capacity- 1.2 cum <b>Water tanker-01</b>	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3m to 5m	3m	
3m	Total area covered under excavation/pits	21.784Ha	19.215Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0	1:0	
3o	Total area put in use under different heads at the end of year	29.52 Ha	22.40Ha	
3p	Production of ROM mineral during last five-year period, as applicable			<b>DISPATCH</b>
		Yr-2017-18- 111462 MT	77610.272 MT	38054.640
		Yr-2018-19- 121876 MT	99821.676 MT	46856.530
		Yr-2019-20- 112431 MT	86253.776 MT	84945.940
		Yr-2020-21- 142000 MT	87466.540 MT	97866.66
	Yr-2021-22-100000MT	33437.692MT	102014.22	
3q	General remarks of inspecting officer on method of mining etc.	Face status- On the date of inspection, excavator was working, the face was clean and the quality target was being achieved.		

#### 4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
4a	Separate dumping of topsoil, OB	YES	NIL	

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	& mineral reject (Rule 32, 33)			
4b	Location of topsoil, OB & mineral reject dumps	NA	NA	
4c	Number of dumps within lease area and outside lease area	NIL	NIL	
4d	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	1	1	
4g	Number of dumps stabilised	1	1	
4h	Whether Retaining wall or garland drain all along dumps are there	NA	NA	
4i	Length of Retaining wall or garland drain all along dump	NA	NA	
4j	Number of settling ponds	NA	NA	
4k	Specific comments of inspecting officer	NA		

#### 5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	NIL	NIL	
5b	Area under backfilling of mined out area	NIL	NIL	
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	NA		

#### 6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2021-22)	Actual work (2021-22)	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	YES (GMDC/CBPG/83/21-22 Dated 16.04.22)	
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	NIL 0.2 200 - NIL	NIL 0.8 1100 18470 NIL	Cost : Related to Plantation

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	vi) Cost incurred on watch & care during the year	50,000 Rs.	2,75,000 Rs.	
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) Nil (ii) Nil (iii) NA (iv)NA (v) NA	(i) Nil (ii) Nil (iii) NA (iv)NA (v) NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	0.2Ha  Manual	0.8Ha  Manual	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Healthy plantation due to proper maintenance near pit- 2 and water being used from nearby pit.		

## 7.0 Mineral Conservation

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	YES	YES	ROM is used to separate which is done manually according to various grades like PG. >52% NPG. 42-52% Dust. <42% All are stacked and the respective data are maintained in register properly.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Bauxite & Sub grade	(i) PG ( $Al_2O_3 \geq 52\%$ ) (ii) NPG ( $Al_2O_3$ 40 to <52%) (iii) Sub Grade size less than 10 mm	
7d	Any beneficiation process at mines	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Only manual sorting – sizing is done for the mineral conservation.		

## 8.0 Environment

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NA	NA	Total ROM is salable and no topsoil or OB/IB is present.
8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects	Yes	Yes	

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	and fines (Rule 33)			
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	200	1100	
8g	Survival rate	100%	70%	
8h	Water sprinkling on roads to control airborne dust	Proposed	As per proposal	Water tank is being used for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The beauty is good around the mining lease area.		

## 9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted up to –Nov-2022 A.R. submitted up to- 2021-22	

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	Manager/Mining Engg: S.S.Kalotara Geologist: J. A. Patel	Found in order.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit area under excavation- 19.215ha Reclaimed land-0.00 Dumps-1.9ha Mineral storage -3.00ha	Found in order.	
9d	Scrutiny of Annual return on afforestation	Plantation work -0.8ha Plantation-1100	Found in order.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NIL	Found in order.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	33437.692MT	Found in order.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale Value- 23,64,51,314.93Rs. Ex. Mine Price-PG-2588.42 Rs. NPG-950.32Rs. Production Cost-1545.87Rs.	Found in order.	

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9i	Scrutiny of Annual return on fixed assets	1566438	Found in order.	
9k	Scrutiny of Annual return on mining machineries	Back hoe-01 Dumper-04 Front end loader-02 Water tanker-01	Found in order.	

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

No violation observed in previous inspection dt. 28/09/2021.

In this inspection, Rule 33 read with 31(4) found to be violated.

Pushendra Gaur  
Regional Controller of Mines  
Indian Bureau of Mines