MCDR Inspection Report

<u>General</u>

SN	Particulars	Details
1(a)	Name of the Mine	Mothala-Balachod Bauxite Mine.
1(b)	Name of Inspecting Officer &	Shri. Sanjaya Kumar Sahoo
1(b)	Designation	Junior Mining Geologist
1(c)	Accompanying Mines Representatives	Shri V H Solanki,Mine Manager
1(d)	Type of Inspection	Star Rating
1(e)	Date of Inspection	17-09-2024
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	280.7686 Hectares
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	M/S GMDC LTD
6	Village	Nani-Balachod
7	Taluka/Mandal	Abadasa
8	District	Kuchchh
9	Pin code	370445
10	State	Gujarat
11	Post office	Mothala
12	Nearest police station	Mothala
13	Nearest Railway station	Bhuj
14	Date of Grant of Mining Lease	12/01/2006 for 30 years
15	Date of Execution	07/03/2007
16	Date of opening of Mine	07/03/2007
17	Date of first Renewal, if applicable and its period & expiry	
18	Date of second Renewal, if applicable and its period & expiry	
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Expiry: 06-03-2057 under the provision of MMDR Amendment Act, 2015. Date of application: 10-01-2020
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	SHRI ROOPWANT SINGH IAS [MD]. M/s. GUJARAT MINERAL DEVELOPMENT CORPORATION Ltd. GMDC Ltd, KHANIJ BHAWAN132 Ft Ring Road, University Ground, Vastrapura, Ahmedabad.(GUJARAT)-380052 Fax No- 07927911321, Phone No- 07927911454 Date of Appointment 14/06/2021
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri S.R.Rathore M/s. GUJARAT MINERAL DEVELOPMENT CORPORATION Ltd. 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 06/09/2023
	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri V H Solanki Mothala-Balachod Bauxite Mines, Nani-Balachod, Tal-Abdasa, Dist Kutch(Gujarat)-370650 E-Mail: vhsolanki@gmdcltd.co.in, Phone No 9879491263. Date of Appointment 24/07/2021
	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri V H Solanki AMIE (Mining)& 2 nd Class
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their duties as per rule 56&57.	Mr. S. R. Kar, M.Sc Geology Date of Appointment:-01.08.2024
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	File No-684(4)(1)/MP-345(117)/2021-22 GNR/1339, dated-13-08-2021 For period 2021-22 to 2025-26
	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	NA
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	Non-captive

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

1.0 Exploration

SN	Item	Proposals		Remarks
		(2023-24)	(2023-24)	
1a	Backlog of previous year	Nil	Nil	
	Exploration over lease area for Geological axis 1 or 2.	G1	G1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposal	Not Applicable	

1d	Balance area to be	No Proposal	Not Applicable	
	explored to bring Geological axis in 1 or 2			
1e	Balance reserves as on 01.04.2024	UNFC 111-	2035691 MT	
1f	General remarks of inspecting officer on geology, exploration etc.	Total area has beer	n explored to G1. No	violation found.

2.0 Development

SN	Item	Proposals	Actual work	Remarks
		(2023-24)	(2023-24)	
2a	Location of development	Pit-7 and new pit	New pit in block-1	
	w.r.t. lease area	in block-1		
2b	Separate benches in	No Proposal	Not Applicable	
	topsoil, overburden and			
	mineral			
	(Rule 15)			
2c	Stripping ratio or ore to OB	1:00	1:00	
	ratio			
2d	Quantity of topsoil	3290	Nil	
	generation in m3			
2e	Quantity of overburden	0	0	
	generation in m3			
2f	General remarks of	Location of Pit- N23	3° 9' 41.16" & E69°	8' 25.42"
	inspecting officer on	Size of Pit- 38.2m x	6.4m x 1m	
	development of pit w.r.t.			
	type of deposit etc.			

3.0 Exploitation

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
3a	Number of pits proposed for production	Pit-7 and new pit in block-1	Pit-7 and new pit in block-1	Location of Pit- N23° 9' 41.16" & E69° 8' 25.42" Size of Pit- 38.2m x 6.4m x 2m
3b	Quantity of ROM mineral production proposed (tonnes)	42000	50	Due to less market demand of bauxite,
3c	Recovery of saleable/usable mineral from ROM production (tonnes)	42000	50	production has been reduced
3d	Quantity of mineral reject generation	Not Proposed	Not Applicable	
3e	Grade of mineral reject generation and threshold value declared	Not Proposed	Not Applicable	
3f	Quantity of sub-grade mineral generation	Not Proposed	Not Applicable	
3g	Grade of sub-grade			

	mineral generation	Not Proposed		Not A	pplicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Ma	nual	Ma	nual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed		Not A _l	oplicable	
3j	Provision of drilling & blasting in mineral benches	When 1	required]	Nil	
3k	Provision of mining machineries in mineral benches	Front end loader- 01		Backhoe- Front en Dumper- water tai	d loader-1, 1,	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height-3m in Mineral		_	t -2m in neral	
3m	Total area covered under excavation/pits	16.	18ha	13.7	718 ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0	0.12	1	:00	
30	Total area put in use under different heads at the end of year	28.87 ha		26.1	138 ha	
3р	Production of ROM	2019-20	41956	2019-20	20085.046	
	mineral during last	2020-21	41268	2020-21	9600	
	five-year period, as	2021-22	42000	2021-22	23097.388	
	applicable in MT	2022-23	42000		2080.268	
		2023-24	42000		50	
3q	General remarks of inspecting officer on method of mining etc.	Mining op	erations we	re not cai	ried out du	ring inspection.

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Temporary topsoil stack	No topsoil removed	
4b	Location of topsoil, OB & mineral reject dumps	In Block-2	In Block-2	
4c	Number of dumps within lease area and outside lease area	Two	Two	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	In Block-2	In Block-2	Location of Dumps: N23°14'42.51" & E69°09'38.8" N23°14'31.56" & E69°09'56.56"
4e	Number of active & alive dumps	Two WD-1, Wd-2	Two	
4 f	Number of dead dumps	No Proposed	Not Applicable	
4g	Number of dumps stabilised	No Proposed	Not Applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	Not Proposed	Not Applicable	
4i	Length of Retaining wall or garland drain all along dump	Not Proposed	Not Applicable	
4j	Number of settling ponds	Not Proposed	Not Applicable	
4k	Specific comments of inspecting officer	No topsoil wa	s generated during	g the year.

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
		(2023-24)	(2023-24)	
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed	Not Applicable	
5b	Area under backfilling of mined out area	Not Proposed	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	For plantation	Nil	No topsoil generated.
5d	Total area fully reclaimed &rehabilitated	Not Proposed	Not Applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Backfilling, reclama proposed for the ye		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
		(2023-24)	(2023-24)	
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). Details should be given in the format as given in Annexure-20.	YES	Yes (Submitted Vide Letter No. = GMDC/CBPG/ENV/151/24- 25) Dated:-30/04/2024	
6b	Management of worked/mined out			

	benches i) Area available for rehabilitation (ha)	Not proposed	Not Applicable	
6b	ii) Afforestation done (ha) iii) No. of saplings planted during the year	200 0.2 Ha	220 0.2ha	
	iv) Cumulative no. of plants	-	4530	
	v) Any other specific method of rehabilitation	Nil	Nil	
	vi) Cost incurred on watch & care during the year	Rs. 50,000/-	Rs. 128420/-	
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	Not Applicable	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not Proposed	Not Applicable	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes	Done	
6f	General remarks of inspecting officer on PMCP compliance & progressive		n near plantation are N23° -fencing of 120m done aga	

7.0 Mineral Conservation

	- IIII CI GII COMBOT VIII CIII			
SN	Item	Proposals	Actual work	Remarks
		(2023-24)	(2023-24)	
7a	ROM Mineral dispatch		ROM production-	
	or grade-wise sorting		50 MT, 40% to	
	within lease area	42000 MT	below 45% grade	
			dispatch- 1667.110	
			MT	
7b	Method of grade-wise			

	mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Chemical grade, below 40% Al ₂ O _{3,} 40% to below 45%	Chemical grade, below $40\%~{\rm Al_2O_3}$	
7d	Any beneficiation process at mines	Not proposed	Not Applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Only manual sorting, sizing is done. Location of Stacks-N23°15'44.2" & E69°07'51.52", N23°15'47.21" & E69°07'55.07".		

8.0 Environment

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Topsoil stack	Nil	No top soil removed
8b	Concurrent use or storage of topsoil	Topsoil stack	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	Not Applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Not Applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	200	4530 (4310+220)	
8g	Survival rate	70%	70%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Regularly done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Topsoil stack was p generated.	roposed but no top s	soil was

9.0 Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks
	Status of submission of	Januaryr-2025 Monthly Return was	
	Monthly and Annual submitted on 07-02-2025.		
	returns	2023-24 Annual Return was submitted	
		on 19-06-2024.	

S.N.	Item	Details GIVEN in	Observation of	Remarks
		A.R.	I/Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engg. / Manager- V.H.Solanki Geologist - Shri A.T Pandya	Geologist- Mr. S. R. Kar Date of Appointment:- 01.08.2024	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit-13.718 ha Reclaimed- 0.0 ha Waste disposal-0.440 ha Infrastructures -2.020 ha Stacking & Sorting Plot -9.960 ha		
9d	Scrutiny of Annual return on afforestation	220 plantation done against target of 200, 0.2 ha, Cumulative No. of plants- 4530		No violation
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil		found
9f	Scrutiny of Annual return on ROM stock and/or graded ore	33938.984 MT		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale value: 1426464.00 Ex -Mine Price- NPG-Rs.855.65/- Production Cost-Rs. 4761.27		
9i	Scrutiny of Annual return on fixed assets	Rs 134624661		
9k	Scrutiny of Annual return on mining machineries	Backhoe-1, Front end loader-1, Dumper-1, water tar	nker-1	

- $10\hbox{--}$ Details of violations observed during current inspection and compliance position of earlier violation pointed out:
 - **a.** No violation was given during previous year inspection.
 - **b.** No violation is pointed out during current year inspection.
 - **C.** Drone data has been submitted by the Lessee on 06-06-2024 and it is found as per SOP.
 - **d.** Self-assessment date of Star Rating by the Lessee is 28-06-2024. 5 Star was given by the Lessee. It has been validated and given 4 Star.

Shri Sanjaya Kumar Sahoo Junior Mining Geologist Indian Bureau of Mines Gandhinagar