

MCDR INSPECTION REPORT FOR THE PERIOD OF 2024-25

1) Name of Inspecting officer:	Mr. Vikrant Khedikar
2) Designation	Senior Assistant controller of mines
3) Accompanying mine official with designation	Mr. Tapas Kumar Gachhayat (AGM-Geology) Mr. Pradeep Bhalekar (Head – Netarhat Cluster) Mr. Vidya Sagar Singh (AGM Operation – Gurdari Bauxite Mine) Mr. Krishnendu Das (Assistant Manager – Geology)
4) Date of Inspection	20/06/2024

Sl. No.	Particulars	Details
1.	Name of the Mines	Gurdari Bauxite Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease area :- 1039.539 Ha. Non Forest Land – 938.039 Ha. Forest Land – 101.46 Ha.
3.	Mine code	07BHR32008
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/935/2011
5	Name of the lessee, Address, Phone, email and fax number	M/s Hindalco Industries Limited Court Road , P.O. :-Lohardaga District :-Lohardaga State:- Jharkhand PIN:-835 302 Phone No.:- 06526-224015, 224016, 224446. Fax No.06526-24112
6	Village	Gurdari, Ambakona, Rajadera & Kujam
7	Taluka/Mandal	Bishunpur
8	District	Gumla
9	Pin code	835206
10	State	Jharkhand
11	Post Office	Dumberpat
12	Nearest Police Station	Gurdari
13	Nearest Railway station	Lohardaga
14	Date of Grant of Mining Lease	10.05.1985
15	Date of Execution	23.03.1985
16	Date of Opening of Mine	23.03.1985
17	Date of First Renewal, if applicable and its period & expiry	23.03.2005
18	Date of second Renewal, if applicable and its period & expiry	lease is extended up to 22.03.2035 as per MMDR(Amendment) Act 2015. Supplementary lease deed is attached with mining plan

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 number and date of appointment	Shri K.N Bhandari Registered Office – Hindalco Industries Limited, Ahura Centre, 1 st Floor, B-wing, Mahakali Caves Road, Andheri East, Mumbai, Pin. - 400093
21	Name of the Mine Agent with Address, phone email, fax number and date appointment in mines.	Prateek Kumar M/s. Hindalco Industries Limited Court Road, Lohardaga, Po.& Dist. – Lohardaga Phone no. – 06526224015 Email – prateek.kumar@adityabirla.com
22	Name of the Mines Manager with Address, Phone, email, fax number and date of appointment	Vidyasagar Singh (B.E. Mining) M/s. Hindalco Industries Limited Court Road, Lohardaga, Po.& Dist. – Lohardaga Phone no. – 06526224015 Email – vidya.ssingh@adityabirla.com
23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Vidyasagar Singh (B.E. Mining) M/s. Hindalco Industries Limited Court Road, Lohardaga, Po.& Dist. – Lohardaga Phone no. – 06526224015 Email – vidya.ssingh@adityabirla.com
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Geologist – Krishnendu Das D.O.A. – 02-12-2021
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	RAN/GUM/BXT/ROMP-1/2024-25 ON DATED 05.04.2024
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	RAN/GML/BX/MS-09/2013-14 17.04.2015 (2015-16 to 2018-19)
27	Mineral(s) granted in lease and proved for mining	Bauxite
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	55 Nos. Bore hole for G1 Exploration	Explored under G1, earlier it was 100m x 100m Grid in 2021-22 proposal (71 BH) and completed the Exploration but it was proposed to be done the exploration in 50m x 50m grid (more 196 BH).
1c	Exploration Agency & Expenditure in lakh Rupee during the year	NA	M/s United Exploration India Pvt. Ltd.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NA	
1e	Balance reserves as on 01.04.2024	NA	7764101 MT (111)	
1f	General remarks of inspecting officer on geology, exploration etc.			In Gurdari lease hold area there are so many quarries having different sizes and different depths all around the leases. Most of the quarries are situated in Kathupani, Polpol, Ramjharria, Ambakona area. The leasehold area forms almost a elongated map of land that exposes bauxites, laterites in the escarpment section, slopes and pits and quarries in the leasehold area as seen in the all the part of the area both in the escarpment sections.

Development

Sl.No	Item	Proposals (2023-24)	Actual work(2023-24)	Remarks
2a	Location of development w.r.t lease area	Kathupani-3 (N2584500-E217400 to N2584700 to E217800), Haralangra (N2577900-E219200 to N2578160-	Kathupani-3 (N2584500-E217400 to N2584700 to E217800), Haralangra (N2577900-E219200 to N2578160-	

		E219450), Dhobhikutumb-4 (N257000- E220200 to N257720- E220600), Ramjharua (N2578150- E221600 to N2578300- E221720)	E219450), Dhobhikutumb-4 (N257000-E220200 to N257720- E220600), Ramjharua (N2578150- E221600 to N2578300- E221720)	
2b	Separate benches in top soil, overburden and mineral (Rule 13)	Top soil – 1 Morum – 1 Laterite - 1	Top soil – 1 Morum – 1 Laterite - 1	2024-25 - Mining plan vide letter no. RAN/GUM/BXT/ROMP-1/2024-25, dated 05/04/2024 -- In Quarry Namely Q-Kekrang-3 N2577100 to N2577240 & E221310 to 221490, no separate benches in ore and overburden have been made to avoid mixing of waste with the Bauxite Ore. Violation Issued
2c	Stripping ratio or ore to OB ratio	1:3.15	1:2.22	
2d	Quantity of topsoil generation in m ³	443248 m ³	202106 m ³	
2e	Quantity of overburden generation in m ³	281685 m ³	298793 m ³	
2f	General remarks of inspecting officer on development etc.			Violation issued for formation of separate benches in soil, waste and ore.

Exploitation

Sl.No	Item	Proposal(2023-24)	Actual Work(2023-24)	Remarks
3a	Number of pits proposal for production	6	6	
3b	Quantity of ROM mineral production proposed	463521 T	223786 T	
3c	Recovery of salable/usable mineral from ROM production	70%	100%	
3d	Quantity of mineral reject generation	139056 T	Nil T	
3e	Grade of mineral reject generation	-	Al ₂ O ₃ – 19.83 & SiO ₂ – 8.55%	

	and threshold value declared																																															
3f	Quantity of sub-grade mineral generation	NA	Nil T																																													
3g	Grade of sub-grade mineral generation	NA	NIL																																													
3h	Manual/Mechanized 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	Deep hole blasting (100mm dia) Burden x Spacing (2.5m x 3m)	Deep hole blasting (100mm dia) Burden x Spacing (2.5m x 3m)																																													
3k	Provision of mining machineries in mineral benches	HEMM	HEMM																																													
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes																																													
3m	Total area covered under excavation/pits	8.97 ha	Mining - 8.64 ha																																													
3n	Ore to OB ratio for the pit/mine during the year	1:1.64	1:2.22																																													
3o	Total area put in use under different heads at the end of year	<table border="1"> <tr><td>Mining</td><td>8.97 ha</td></tr> <tr><td>Waste Dump</td><td>0 ha</td></tr> <tr><td>Mineral Beneficiation Plant</td><td>0 ha</td></tr> <tr><td>Mineral Storage</td><td>0 ha</td></tr> <tr><td>Tailing Pond</td><td>0 ha</td></tr> <tr><td>Roads, Conveyors, pipeline, electric line</td><td>0 ha</td></tr> <tr><td>Infrastructure</td><td>0ha</td></tr> <tr><td>Township</td><td>0ha</td></tr> <tr><td>Topsoil</td><td>0 ha</td></tr> <tr><td>Effluent Treatment Plant</td><td>0 ha</td></tr> <tr><td>Others (Magazine, Rainwater harvesting, Back Filling Area1)</td><td>0 ha</td></tr> </table>	Mining	8.97 ha	Waste Dump	0 ha	Mineral Beneficiation Plant	0 ha	Mineral Storage	0 ha	Tailing Pond	0 ha	Roads, Conveyors, pipeline, electric line	0 ha	Infrastructure	0ha	Township	0ha	Topsoil	0 ha	Effluent Treatment Plant	0 ha	Others (Magazine, Rainwater harvesting, Back Filling Area1)	0 ha	<table border="1"> <tr><td>Mining</td><td>8.74 ha</td></tr> <tr><td>Waste Dump</td><td>0 ha</td></tr> <tr><td>Mineral Beneficiation Plant</td><td>0 ha</td></tr> <tr><td>Mineral Storage</td><td>0 ha</td></tr> <tr><td>Tailing Pond</td><td>0 ha</td></tr> <tr><td>Roads, Conveyors, pipeline, electric line</td><td>0 ha</td></tr> <tr><td>Infrastructure</td><td>0 ha</td></tr> <tr><td>Township</td><td>0 ha</td></tr> <tr><td>Topsoil</td><td>0 ha</td></tr> <tr><td>Effluent Treatment Plant</td><td>0 ha</td></tr> <tr><td>Others (Magazine, Rainwater harvesting, Back Filling Area-1)</td><td>0 ha</td></tr> </table>	Mining	8.74 ha	Waste Dump	0 ha	Mineral Beneficiation Plant	0 ha	Mineral Storage	0 ha	Tailing Pond	0 ha	Roads, Conveyors, pipeline, electric line	0 ha	Infrastructure	0 ha	Township	0 ha	Topsoil	0 ha	Effluent Treatment Plant	0 ha	Others (Magazine, Rainwater harvesting, Back Filling Area-1)	0 ha	
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		Green Belt	1 ha	Green Belt	1.4 ha	
3p	Production of ROM mineral during last five-year period, as applicable	2019-20	324629 MT	2019-20	268725 MT	
		2020-21	324768 MT	2020-21	223208 MT	
		2021-22	324798 MT	2021-22	252277 MT	
		2022-23	300057 MT	2022-23	270665 MT	
		2023-24	463521 MT	2023-24	223786 MT	
3q	General remarks of inspecting officer on method of mining etc.					

Solid Waste Management-Dumping

Sl.No	Item	Proposal (2023-24)	Actual Work(2023-24)	Remarks
4a.	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Soil and OB will be used for reclamation of the backfilled quarry concurrently	Soil and OB is used for reclamation of the backfilled quarry concurrently.	
4b	Location of topsoil, & OB & mineral reject dumps (Give coordinates with mRL)	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)	NA	NA	
4e	Number of active & alive dumps	Nil	Nil	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	NA	NA	
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 on waste dump management			

Solid Waste Management-Backfilling

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Proposed	Partly Implemented	Backfilling is been done after exhaustion of Bauxite from the Quarry.
5b	Area under backfilling of mined out area	7.37 HA	5.42 HA	Void area backfilling was in process.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	soil will be used for reclamation of the backfilled quarry	soil is being used for reclamation of the backfilled quarry	
5d	Total area fully reclaimed & rehabilitated	--	88.32 Ha	
5e	General remarks of inspecting officer on backfilling, reclamation etc.		Violation Issued	Backfilling for 'Reclamation and Rehabilitation' and its plan as shown in plates submitted with MP was not implemented at Q-Harangra quarry N2578138 to N2578306 & E219701 to E219815 and Ramjharia Quarry 2 N2578070 to N2578400 & E221600 to E221630 as per the approved Review of Mining Plan during 2024-25.

Progressive Mine Closure Plan

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	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	Annual Report on PMCP to be submitted in time.	Annual Report on PMCP submitted in time along with Annual Return.	As per management annual return will be submitted within the stipulated time.
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of sapling 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	NA NA NA NA NA	NA NA NA NA NA	
6c	Compliance on reclamation and rehabilitation by back filling i) Voids available for backfilling (LxBxD) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	500483 M3 7.37 Ha 18000 Plants NA NA	122849 M3 5.42 Ha 6000 Plants 3.99 HA NA	

6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	7.37 Ha 7.37 Ha Plantation after Backfilling	5.42 Ha 5.42 Ha Plantation after Backfilling	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring to be done	Environmental monitoring of Air, Noise & Water in core & buffer zones are done at regular intervals	
6f	General remarks of inspecting & progressive closure operations.			Survival rate was 60% within mining lease which can be improved.

Mineral Conservation

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes	Grade wise stack
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	NA	NA	
7d	Any beneficiation process at mines	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues			Entire ROM is sorted and sized in off the pit which is then transported to the captive plant. 223786 MT production has been achieved during the year 2023-24

Environment

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Partially Implemented	
8b	Concurrent use or storage of topsoil	Concurrent backfilling	Concurrent backfilling	
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	NIL	NIL	All overburden is backfilled in mined-out areas
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	YES	Overburden & waste rock used for restoring the land to its original use.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	All overburdens will be backfilled in mined-out areas, soil will be spread for reclamation.	All overburden is being backfilled in mined-out areas; soil also is being spread for reclamation.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	Yes	Yes	
8g	Survival rate	70%	60%	
8h	Water sprinkling on roads to control airborne dust	YES	Yes	Water sprinkling on roads to control airborne dust is done regularly.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area.			Surrounding area beyond lease area is green. The aesthetic beauty around mines can be improved by gap plantation.

Compliance of Rule 45

Sl.No	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns			Monthly Returns Submitted within the stipulated time.
Sl.No.	Item			Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	-	Pending	Lessee declared that annual returns will be submitted within the stipulated time
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	-	Pending	
9d	Scrutiny of Annual return on afforestation	-	Pending	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	-	Pending	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	-	Pending	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.	-	Pending	
9h	Scrutiny of Annual return on fixed assets	-	Pending	
9i	Scrutiny of Annual return on mining machineries	-	Pending	

Details of violations observed during current inspection and compliance position of violation pointed

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1. Violation observed: - MCDR- 2017 Rule 11(1), Rule-13(1), Rule-31(4) issued on date 25/06/2024.

Vikrant Khedikar,
Sr. Assistant controller of Mines,
26th June 2024