

MCDR INSPECTION REPORT FOR THE PERIOD OF 2023-24

1) Name of Inspecting officer:	Shri Vikrant Khedikar
2) Designation	Senior Assistant controller of mines
3) Accompanying mine official with designation	Shri Rajesh Ranjan Ambastha – G.M-Mines Shri Tapas Kr. Gachhayat – AGM- Geology Shri Gauri Shankar Prasad- Assistant Manager- Geology Shri Sunil Kr. Chaudhary- Assistant Manager- Mines
4) Date of Inspection	05/09/2024

Sl. No.	Particulars	Details
1.	Name of the Mines	Bhusar Bauxite Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Rayti Land-65.31 Forest Land- Nil
3.	Mine code	07JHK12006
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, Lohardaga-835302
6	Village	Bhusar
7	Taluka/Mandal	Kisko
8	District	Lohardaga
9	Pin code	835302
10	State	Jharkhand
11	Post Office	Lohardaga
12	Nearest Police Station	Kisko
13	Nearest Railway station	Lohardaga
14	Date of Grant of Mining Lease	11.7.1966
15	Date of Execution	11.07.1981
16	Date of Opening of Mine	1978
17	Date of First Renewal, if applicable and its period & expiry	15 Yrs (11.07.1966 to 10.07.1981) 15 Yrs (11.07.81 to 10.07.1996)
18	Date of second Renewal, if applicable and its period & expiry	Valid up to 31.03.2030
19	Date of submission of renewal application if Mining operations are continuing under deemed extension	30.03.2017
20	Name of the Nominated Owner with Address, phone, email ,fax number and date of appointment	Shri A.K. Agarwala (10.11.2015) M/S Hindalco industries ltd, PO-Renukoot, Dist- Sonbhadra,U.P

21	Name of the Mine Agent with Address, phone email, fax number and date appointment in mines.	Shri Prateek Kumar (04.08.2022), M/S Hindalco Industries Ltd, court road, Lohardaga, Jharkhand
22	Name of the Mines Manager with Address, Phone, email, fax number and date of appointment	Shri Raj Kumar Sinha (26.05.2022) M/S Hindalco Industries Ltd, court Road, Lohardaga, Jharkhand.
23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Shri Rajesh (B. Tech- Mining) 02.02.2023
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Malaya Kr. Prusty (M.sc-Tech, Applied Geology) 28.02.2023
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	<ol style="list-style-type: none"> 1. Mining plan - 314(3)/93 MCCM (CZ)/MP-12, dated 25/02/1994, 01/04/2005 to 31/03/2010. 2. Scheme of mining - 314(3)/2011-MCCM (CZ)/MS-21. Dated 22/12/2011 from 2011-12 to 2010-11 to 2014-15. 3. Modified mining plan – 314(3)/2010-MCCM (CZ)/MP-7/1470. Dated 11/10/2010 (for reduction of area from 84.77 Ha to 65.31 Ha 4. Modification Of MP – RNC/LOH/BX/MP-15/2015-16 dated 31/05/2016 (From 2015-16 to 2019-20. 5. Modification of MP – RAN/LOH/BX/MP-04/2019-20 dated 29/07/2019. 6. Review of mining plan – RAN/LOH/BX/MP-22/2019-20 dated 16/10/2020. From 2019-20 to 2023-24 7. Modification of MP – RAN/LOH/BX/MP-30/2021-22, Dated 22/04/2022
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modification of MP – RAN/LOH/BX/MP-30/2021-22, Dated 22/04/2022, from 2020-21 to 2024-25
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.)

Sr.NO	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	

1c	Exploration Agency & Expenditure in lakhs Rupee during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserves as on 01.04.2024	NA	1020416 (Tonne)	
1f	General remarks of inspecting officer on geology, exploration etc.			In 2018 - 19 Boreholes were drilled and in 2020 - 5 boreholes were drilled. Area covered under G1- 65.31 Ha.

Development

Sr.NO	Item	Proposals (2023-24)	Actual work(2023-24)	Remarks
2a	Location of development w.r.t lease area	2599522N - 2599663N 254412E- 254734E	2599522N - 2599663N 254412E- 254734E	Nil
2b	Separate benches in top soil, overburden and mineral (Rule 15)	Soil- 1 H- 6 Mtr O.B - 2 H- 6 Mtr Ore -2 H-6 Mtr	Soil-1 H-3.5 Mtr O.B - 2 H- 4.5 Mtr Ore -2 H- 3.5 Mtr	As per approved DGMS norms.
2c	Stripping ratio or ore to OB ratio	1:0.27	1:1.08	
2d	Quantity of topsoil generation in m ³	51450 m ³	116246. m ³	
2e	Quantity of overburden generation in m ³	74850 m ³	115391 m ³	
2f	General remarks of inspecting officer on development etc.		Concurrent backfilling is practiced after excavation.	

Exploitation

Sr.NO	Item	Proposal(2023-24)	Actual Work(2023-24)	Remarks
3a	Number of pits proposal for production	1	1	As per modified MP Quarry-B
3b	Quantity of ROM mineral production proposed	279792 Tons	251210 Tons	
3c	Recovery of salable/usable mineral from ROM production	90%	100%	

3d	Quantity of mineral reject generation	27979 (Tonne)		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	Nil		Nil	
3h	Manual/Mechanized method adopted for segregating from ROM	Mechanized (shovel Dumper Air Compressor Crusher Crusher)		Mechanized (shovel Dumper Air Compressor Crusher Crusher)	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil		Nil	
3j	Provision of drilling & blasting in mineral benches	Regulation 106(2)(b), 100 mm dia drilled by Crawler Mounted Drill		Regulation 106(2)(b), 100 mm dia drilled by Crawler Mounted Drill	
3k	Provision of mining machineries in mineral benches	MMR 1961		MMR 1961	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Soil-1 H- 6mtr O.B H- 6mtr Ore H-6mtr	1 - 2 -2	Soil-1 H-3.5mtr O.B H- 4.5 Mtr Ore H- 3.5mtr	- - 2 -2
3m	Total area covered under excavation/pits	Mining -11.57 ha		Mining – 10.67 ha	
3n	Ore to OB ratio for the pit/mine during the year	1:027		1:1.08	
3o	Total area put in use under different heads at the end of year	Mining	56.96	Mining	59.925ha
		Waste Dump	2.36ha	Waste Dump	2.36 ha
		Mineral Beneficiation Plant	0.00ha	Mineral Beneficiation Plant	0.00ha
		Mineral Storage	0.64 ha	Mineral Storage	0.60ha
		Tailing Pond	0.00ha	Tailing Pond	0.00ha
		Roads, Conveyors, pipeline, electric line	1.30ha	Roads, Conveyors, pipeline, electric line	1.30ha
		Infrastructure	0.00ha	Infrastructure	0.00 ha
		Township	0.00ha	Township	0.00ha
		Topsoil	0.00 ha	Topsoil	0.00 ha
		Effluent Treatment Plant	0.00ha	Effluent Treatment Plant	0.00ha
		Others (Magazine, Rainwater harvesting, Back Filling Area1)	0.00ha	Others (Magazine, Rainwater harvesting, Back Filling Area-1)	0.00ha
		Green Belt	0.00ha	Green Belt	0.00 ha
3p	Production of ROM mineral during last five-year period, as applicable	2019-20	279019 MT	2019-20	5093 MT
		2020-21	278743 MT	2020-21	38757 MT
		2021-22	279457MT	2021-22	137495MT
		2022-23	250851 MT	2022-23	248213MT
		2023-24	251812 MT	2023-24	251210 MT
3q	General remarks of inspecting officer on method			As per proposal	

	of mining etc.		
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Solid Waste Management-Dumping

Sr.NO	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
4a.	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Nil	Nil	Concurrent backfilling is practiced and then reclaiming the land by suitable native plantation.
4b	Location of topsoil, & OB & mineral reject dumps (Give coordinates with mRL)	Nil	Nil	Concurrent backfilling is practiced and then reclaiming the land by suitable native plantation.
4c	Number of dumps within lease area and outside lease area	5	5	Within Lease Area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	1. 2600112N-2600148N 254139E-254180E 2. 2599463N-2599479N 254710E-254733E 3. 2599942N-2600035N 254651E-254837E 4. 2599883N-2599971N 254364E-254487E 5. 2600159N-2600235N 253977E-254017E	1. 2600112N-2600148N 254139E-254180E 2. 2599463N-2599479N 254710E-254733E 3. 2599942N-2600035N 254651E-254837E 4. 2599883N-2599971N 254364E-254487E 5. 2600159N-2600235N 253977E-254017E	All Dumps are Inactive. Two numbers of Stabilized Dumps). Within lease area. OB dump 1 OB dump 2
4e	Number of active & alive dumps	Nil	Nil	Concurrent backfilling is practiced and then reclaiming the land by suitable native plantation.
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	2	2	Within Lease Area
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Nil	
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	
4j	Number of settling ponds	0	0	
4k	Specific comments of inspecting officer on waste dump management		Concurrent backfilling is practiced and then reclaiming the land by suitable native plantation.	

Solid Waste Management-Backfilling

Sr.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	Fully extracted & reclamation is being carried out	Backfilling is been done after exhaustion of Bauxite from the Quarry.
5b	Area under backfilling of mined out area	0.77 Ha	0.77 Ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	For Reclamation & Rehabilitation	For Reclamation & Rehabilitation	
5d	Total area fully reclaimed & rehabilitated	42.05 Ha	44.523 Ha	
5e	General remarks of inspecting officer on backfilling, reclamation etc.		Concurrent Backfilling is been done after exhaustion of Bauxite from the Quarry.	

Progressive Mine Closure Plan

Sr.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	Yes	Yes	
6b	Management of worked/mined out benches	NIL	NIL	
	i) Area available for rehabilitation (ha)	0.77 ha	0.77 Ha	
	ii) Afforestation done (ha)	0.77 ha	0.77 ha	
	iii) No. of sapling planted during the year	1950	2150	
	iv) Cumulative no. of plants	Nil	129608	
	v) Any other specific method of rehabilitation	Nil	Nil	
	vi) Cost incurred on watch & care during the year	263250/-	263000/-	

6c	Compliance on reclamation and rehabilitation by back filling	0.77 ha	0.77 ha	
	i) Voids available for backfilling (L x B x D)	55 x 62 x 12	40 x 50 x 9	
	ii) Void filled by waste/tailings	7790 M2	7700 M2	
	iii) Afforestation on the backfilled area	0.77 ha	0.77 ha	
	iv) Rehabilitation by making water reservoir	Nil	Nil	
	v) Any other specific means	Nil	Nil	
6d	Compliance of Rehabilitation of waste land within lease			
	i) Afforestation	1950	2150	
	ii) Area rehabilitated (ha)	0.77 ha	0.77ha	
	iii) Method of rehabilitation	Plantation	Plantation	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, Water, Noise Monitoring under CPCB rules	Air, Water, Noise) Monitoring Done Quarterly under CPCB Rules	
6f	General remarks of inspecting & progressive closure operations.		Concurrent backfilling is practiced and then reclaiming the land by suitable native plantation. Air, water and noise monitoring done as per CPCB standards.	

Mineral Conservation

Sr.NO	Item	Proposal(2023-24)	Actual Work(2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	All ROM is transported to crushing plant by 25 Tons dumper.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Nil	Nil	Only crushing and screening is done.
7c	Different grade of mineral sorted out at mines	Nil	Nil	
7d	Any beneficiation process at mines	Nil	Nil	Crushing and screening at plant.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues		Crushing screening and washing of low grade ore is proposed as and when required.	

Environment

Sr.N O	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	51450 m3	116246 m3	Continuous Spreading over backfilled area
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	Nil	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent Backfilling	Concurrent Backfilling	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	proposed	0.77 Ha	
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	1950 Sapling	2150 Sapling	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Regular sprinkling with water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area.		Concurrent backfilling is practiced and then reclaiming the land by suitable native plantation. Air, water and noise monitoring done as per CPCB standards.	

Compliance of Rule 45

Sr.NO	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	
Sr.NO.	Item		Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Eng- Rajesh Ranjan Ambastha Geologist- Malaya Prusty Manager- Raj Kumar Sinha	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		59.925 ha	
9d	Scrutiny of Annual return on Afforestation	0.77Ha/1950	0.77 ha/2150plant	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	27979 Tonne	Nil	Used for backfilling
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	251210 are showing as closing stock. Lessee was communicated for rectification.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.		Ex-Mine Price-1246.71	
9h	Scrutiny of Annual return on fixed assets	1. Industrial Building – 22408661/- 2. Residential Building – 1105512/- 3. Plant and Machinery – 130795673/- 4. Repairs and exploration etc. – 38657689/- 5. Total - 192967535/-		
9i	Scrutiny of Annual return on mining machineries	No. of machinery Electrical Nonelectrical SHOVEL (HYDRAULIC) 0.900 CUM 1 Non Electrical Opencast SHOVEL (HYDRAULIC) 1.900 CUM 1 Non Electrical Opencast SHOVEL (HYDRAULIC) 1.900 CUM 1 Non Electrical Opencast DUMPER 25.000 TONNE 1 Non Electrical Opencast DUMPER 20.000 TONNE 3 Non Electrical Opencast CRUSHER 120.000 T/H 1 Non Electrical Opencast CRUSHER 200.000 T/H 1 Electrical Opencast AIR COMPRESSOR 260.000 CUM/MN 1 Non Electrical Opencast CRANE 10.000 TONNE 1 Non Electrical Opencast EXPLOSIVE VAN 0.000 TONNE 1 Non Electrical Opencast FRONT END LOADER 2.100 CUM 1 Non Electrical Opencast		

Details of violations observed during current inspection and compliance position of earlier violation pointed – Nil, Violation 11(1) dated 22/09/2022 complied.

Date: 22/10/2024

Vikrant M. Khedikar
Sr. Assistant Controller of Mines,
Indian Bureau of Mines, Ranchi,
(Name of inspecting officer with designation and date)