

## MCDR INSPECTION REPORT

**General**

**Date of Inspection: 28/08/2024**

Sl. No.	Particulars	Details
1.	Name of the Mines	Jalim & Sanai Bauxite Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	12.14 Ha a. Forest Land – Nil b. Non-Forest Land- 12.14 Ha <ul style="list-style-type: none"><li>• G.M Land- Nil</li><li>• Raiyati Land- 12.14 Ha</li></ul> Others- Nil
3.	Mine code	07BHR32009
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	Jalim & Sanai
7	Taluka/Mandal	Bishunpur
8	District	Gumla & Lohardaga
9	Pin code	835231
10	State	Jharkhand
11	Post Office	Bishunpur
12	Nearest Police Station	Bishunpur
13	Nearest Railway station	Lohardaga
14	Date of Grant of Mining Lease	16.10.1974
15	Date of Execution	16.10.1974
16	Date of Opening of Mine	01.11.1983
17	Date of First Renewal, if applicable and its period & expiry	The lease deed renewal application was made on 08.10.03 for a period of 20 years.
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	The lease deed renewal application was made on 08.10.03 for a period of 20 years.
20	Name of the Nominated Owner with Address, phone, email ,fax number and date of appointment	Shri K. N. Bhandari

		5, New Power House Road, Sector-7, Jodhpur-342004, Rajasthan Date of appointment: - 10 <sup>th</sup> Nov 2015,
21	Name of the Mine Agent with Address, phone email, fax number and date appointment in mines.	Shri Prateek Kumar, Court Road Lohardaga, Hindalco Complex – 835302, Date of appointment: - 04.08.2022
22	Name of the Mines Manager with Address, Phone, email, fax number and date of appointment	Shri Tripurari Singh Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 9431106589 Date of Appointment -01-07-2020
23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Shri Soumya Ranjan Panda, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 7070104080 Date of appointment: - 21 <sup>th</sup> September 2022
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Complied Shri Debjyoti Das, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 6289559708 Date of Appointment -06.11.2023
25	Name and designation of the accompanying officers during the inspection.	Shri Tripurari Singh Mines Manager
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	06/02/2023
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	RAN/LOH/BXT/ROMP-3/2022-23 dated 06.02.2023
28	Mineral(s) granted in lease and proved for mining	Bauxite
29	Method of Mining(Open cast, Underground)	Open Cast
30	Category (Fully Mechanized, Others or Manual)	Others
31	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.)

## Exploration

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	NA	NA	No backlog
1b	Exploration over lease area for Geological axis 1 or 2.	Nos such proposal	nil	mineralized area Explored under G1
1c	Exploration Agency & Expenditure in lakh Rupee during the year	NA	NA	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal	NA	mineralized area Explored under G1 and G2
1e	Balance reserves as on 01.04.2024...		79481.62 T	nil
1f	General remarks of inspecting officer on geology, exploration etc.	Mineralized area of the lease is explored under G1 and G2		

## Development

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t lease area	Pit 2 &3	Pit 2 &3	Quarry excavated in the proposed area
2b	Separate benches in top soil, overburden and mineral (Rule 15)	Maintained	Maintained	Separate benches are maintained
2c	Stripping ratio or ore to OB ratio	1:1.3	1:0.61	nil
2d	Quantity of topsoil generation in m <sup>3</sup>	37008	8216.27	nil
2e	Quantity of overburden generation in m <sup>3</sup>	40133	26283	nil
2f	General remarks of inspecting officer on development etc.	Separate benches are maintained in OB and in mineral.		

## Exploitation

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
3a	Number of pits proposal for production	Pit 2&3	Pit 2&3	Pit are in the proposed area
3b	Quantity of ROM mineral production proposed (cum)	21740	18771.7	nil
3c	Recovery of salable/usable mineral from ROM production	90%	90%	nil

3d	Quantity of mineral reject generation	5000.20 T	nil	nil	
3e	Grade of mineral reject generation and threshold value declared	NA	NA	Grade of rejects is below threshold value	
3f	Quantity of sub-grade mineral generation	No such proposal	Nil	No subgrade generated	
3g	Grade of sub-grade mineral generation	NA	NA	nil	
3h	Manual/Mechanized method adopted for segregating from ROM	Semi-mechanized	Semi-mechanized	nil	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No such proposal	Nil	nil	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	nil	
3k	Provision of mining machineries in mineral benches	Yes	Yes	nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Bench height is kept at 6m as per the proposal	
3m	Total area covered under excavation/pits	9.38 ha (cumulative)	7.65 (covered under current working)	nil	
3n	Ore to OB ratio for the pit/mine during the year	1:1.13	1: 1:0.61	nil	
3o	Total area put in use under different heads at the end of year	9.40 ha	8.15 ha	nil	
3p	Production of ROM mineral during last five-year period, as applicable	PROPOSED		ACTUAL	
		2019-20:	49439 T	2018-19:	45545 T
		2020-21:	49236 T	2019-20:	41548 T
		2021-22:	49184 T	2020-21:	45855 T
		2022-23:	49914 T	2022-23:	49000 T
		2023-24:	45001.8 T	2023-24:	43175 T
3q	General remarks of inspecting officer on method of mining etc.	Opencast mining method is adopted for development/excavation. 6m Bench height is maintained in waste			

	and mineral. Drilling and blasting is been done in mineral for ROM excavation.
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### **Solid Waste Management-Dumping**

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
4a.	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	No such proposal	Simultaneously backfilled	Concurrent backfilling is done
4b	Location of topsoil, & OB & mineral reject dumps	NA	NIL	Concurrent backfilling is done hence there is no topsoil, OB or reject dump in mine
4c	Number of dumps within lease area and outside lease area	NA	NIL	nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NIL	nil
4e	Number of active & alive dumps	NA	NIL	nil
4f	Number of dead dumps	NA	NIL	nil
4g	Number of dumps stabilized	NA	NIL	nil
4h	Whether Retaining wall or garland drain all along dumps are there	No such proposal	NIL	No provision of waste dump in mine
4i	Length of Retaining wall or garland drain all along dump	NA	NIL	nil
4j	Number of settling ponds	NA	NIL	nil
4k	Specific comments of inspecting officer on waste dump management	Waste generated are used for backfilling of exhausted pits.		

### **Solid Waste Management-Backfilling**

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
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5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Full Extraction	Fully extracted	Full extraction is done prior to backfilling of mined out pit
5b	Area under backfilling of mined out area	0.35 Ha	0.26 Ha	Further backfilling is in progress on the remaining area.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent spreading of top-soil after backfilling is in proposal	As per the proposal	Concurrent backfilling of waste in exhausted pit followed by spreading of top soil over backfilled area is in practice.
5d	Total area fully reclaimed & rehabilitated	0.35 Ha	0.26 Ha (reclamation by the means of backfilling) 0.26 Ha (afforestation on the backfilled area)	nil
lin5e	General remarks of inspecting officer on backfilling, reclamation etc.	Concurrent backfilling of waste in exhausted pit followed by spreading of top soil over backfilled area is in practice.		

### **Progressive Mine Closure Plan**

Sl.No	Item	Proposals (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	Submitted on time	Submitted on time	Submitted on time along with Annual Return
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	0.35 HA	0.26 HA (Afforestation on backfilled area)	Further backfilling is in progress on the remaining area.
	ii) Afforestation done (ha)	0.75 Ha	2.33 Ha	nil

	iii) No. of sapling planted during the year	1200	1500	
	iv) Cumulative no. of plants	6100	7900	
	v) Any other specific method of rehabilitation	No specific proposal	Nil	nil
	vi) Cost incurred on watch & care during the year	240000/-	260000/-	nil
6c	Compliance on reclamation and rehabilitation by back filling			
	i) Voids available for backfilling	Q2+Q3 – 0.35 Ha	Q2 + Q3 = 0.26 Ha (90m×25m×3.6 m)	nil
	(LxBxD	Nil	Nil	nil
	ii) Void filled by waste/tailings			
	iii) Afforestation on the backfilled area	0.75 HA	2.33 HA	nil
	iv) Rehabilitation by making water reservoir	No such proposal	NIL	nil
	v) Any other specific means	Nil	Nil	nil
6d	Compliance of Rehabilitation of waste land within lease			
	i) Afforestation	No such proposal on waste land	Nil	nil
	ii) Area rehabilitated (ha)	No such proposal on waste land	Nil	Nil

	iii) Method rehabilitation	No such proposal on waste land	Nil	Nil
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly	As per proposal	Parameters are within limit
6f	General remarks of inspecting & progressive closure operations.	Concurrent backfilling of waste in exhausted pit followed by spreading of top soil over backfilled area is in practice.		

### **Mineral Conservation**

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	All mineral above threshold is dispatched	All mineral above threshold is dispatched from the mine	nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	nil
7c	Different grade of mineral sorted out at mines	All mineral above threshold are dispatched	All mineral above threshold are dispatched	nil
7d	Any beneficiation process at mines	No such proposal	nil	nil
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	All mineral above threshold is dispatched from the mine		

### **Environment**

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Concurrent spreading over backfill area	As per the proposal	Concurrent spreading of top soil over backfilled area is in practice.



8b	Concurrent use or storage of topsoil	Concurrent use	As per the proposal	nil
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	No such proposal	Nil	Waste is used for backfilling of mined out pit
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent Backfilling	As per the proposal	Waste is used for backfilling of mined out pit
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Simultaneously concurrent backfilling and reclamation	Simultaneously concurrent backfilling and reclamation	concurrent backfilling and reclamation is in practice
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	1200 numbers	1500 within lease area	nil
8g	Survival rate	70%	80%	nil
8h	Water sprinkling on roads to control airborne dust	Provision of Water tanker is kept in provision to control airborne dust	As per the proposal	nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area.	Mine is located at top of plateau devoid of major vegetation however slope of plateau having vegetation of mainly sal tree.		

### Compliance of Rule 45

Sl.No	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Return submitted (2023-24)	Complied timely
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineer: Satyabrata Behera Geologist: Debajyoti das	Information found to be correct
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited and abandoned by opencast (O-C) mining: 19821 ha Covered under current (O-C) Workings: 7.651 ha Reclaimed-rehabilitated: 9.800ha Occupied by plant, buildings, residential, welfare buildings and roads: 0.500 ha Work done under progressive mine closure plan during the year: 0.28 ha	information seems to be in order
9d	Scrutiny of Annual return on afforestation	Plantation within the lease area: 1500nos, survival: 80%, Total no. of trees at the end of the year: 6100 nos	information seems to be correct
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	no mineral reject generated during the reporting year
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock: 0T, closing stock: 0T, production: 43175 T	information seems to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.	Cost of production: Rs. 1364.59 per tonne.	information seems to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 2192706/-	information seems to be correct
9i	Scrutiny of Annual return on mining machineries	Air compressor (400cum/min): 1nos. Others (non-elec.): 1 nos.	information seems to be correct



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